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United States  
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July 1984

# World Food Aid Needs and Availabilities, 1984







WORLD FOOD AID NEEDS  
AND AVAILABILITIES, 1984

July 1984



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## FOREWORD

This is the ninth report of the Economic Research Service on world food aid needs and availabilities. It is prepared in response to the requirement of Public Law 480, as amended, that annual "global assessments of food production and needs" be submitted to the Congress. The report provides the Executive Branch and the Congress with information to employ in determining tentative fiscal 1985 and 1986 food aid budget allocations. In addition, it increasingly serves the wider purpose of providing a detailed and aggregate look at world food supplies and food aid needs for program and policy officials within donor governments, analysts in international research organizations and universities, and private agencies involved in food distribution. The U.S. Agency for International Development partially finances USDA maintenance of data on food aid recipient countries and the analysis of food aid needs.

The low-income countries analyzed in this report were selected on the basis of their 1981 per capita gross national products and their food aid history. Countries were included if their per capita incomes were low enough--\$795 or less-- to qualify for concessional loan terms from the International Development Association. However, several countries meeting this criterion were excluded from the report because of their position as food exporters or their consistently large foreign exchange surpluses. By the same token, several countries not meeting this criterion were included in the report on the basis of their past dependence on food aid or the severity of their current food or financial problems.

This report presents two alternate measures of the overall food import requirements (commercial plus concessional) and the food aid assistance needs of each country for 1984/85 and 1985/86. These status quo and nutrition-based assessments are based on two different sets of normative judgements and assumptions regarding the role of food aid and the considerations that might govern its allocation.

The basic assumption underlying the status quo assessment is that food aid could be allocated to prevent food supplies from falling much below recently available levels. Status quo food aid needs thus stabilize per capita consumption by filling shortfalls in domestic production and import capacity with food aid.

For many countries, status quo food aid need estimates closely approximate recent actual concessional food imports. This is because recent patterns of domestic food production and imports, combined with forecasts of domestic production and import capacity are used in their calculation. However, these estimates assume normal weather and production levels. The status quo estimates of food aid needs for 1984/85 and 1985/86

should be interpreted as forecasts only to the extent that their underlying assumption is taken as the appropriate prescription by donors who are programming food aid, and that abrupt production changes do not alter food consumption levels.

The nutrition-based assessment carries the analysis beyond concerns with stable food supplies to address the continuing problem of undernutrition in many of the developing countries. The assumption made in this assessment is that food aid allocations could be made with the primary aim of closing the gap between food availabilities and an internationally accepted nutritional standard in recipient countries. The nutrition-based aid need estimates thus provide a measure of the nutrition gap, net of the capacity to import food commercially.

Neither of the measures deals specifically with the ability of a country's infrastructure to absorb food aid without disruptions. However, status quo estimates, by supporting previous levels of per capita availability, are consistent with infrastructural capacity. The very large nutrition-based food aid needs estimated for some countries might be viewed as more than guidelines for food aid. They identify countries that may require assistance either to develop both the financial and the physical capacity to import food, or to increase domestic food production consistent with agricultural resources.

The import requirement and food aid need estimates in this report are based on national agricultural and economic data. These estimates provide a basis for financial and logistics planning by both donor and food aid recipient countries. It should be apparent, however, that delivering imported foods to the communities which are deprived by national food shortfalls is a major undertaking, and the incapacity of countries to successfully accomplish this is frequently an impediment to successful use of international food aid. Using United States agricultural abundance to better the lives of people in less advantaged countries requires commitment on a broad front, to contribute both commodities and the complementary technical and capital assistance required to successfully deliver benefits to needy populations. Reducing dependence on food aid requires additional scientific cooperation and both technical and policy assistance.

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Note: This report was prepared prior to the release of complete official 1984/85, or any official 1985/86 supply/utilization estimates by USDA. The 1984/85 and 1985/86 supply/utilization projections shown in the report are based on trends and analytical judgements used in analyzing food aid needs in developing countries. Official supply/utilization estimates for 1984/85 were issued beginning in May, 1984. USDA will not issue official supply/utilization estimates for 1985/86 until spring, 1985.

Approved by the World Agricultural Outlook Board



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## SUMMARY

This report assesses 1984/85 and 1985/86 food import and food aid requirements for 67 food aid recipient countries. <sup>1/</sup> Two food aid assessments are made, in recognition of the need of these countries to both maintain stability in food supplies and to progressively improve the diet of their population. The status quo assessment estimates food aid requirements to sustain food availability at 1980/81-1983/84 average levels. The nutrition-based assessment estimates the food aid which would be required for countries to meet average minimum dietary standards as established by the World Health Organization and the Food and Agriculture Organization of the United Nations.

Import requirements needed to sustain existing levels of food availability (the status quo) are 1 million tons greater in 1984/85 than in 1983/84. However, estimated food aid needs have declined by 640,000 tons. The estimated 1984/85 food aid requirement is 11.7 million tons, 38 percent of the 30.8 million tons of food imports required to meet status quo requirements.

These global changes in status quo food aid needs mask great regional diversity. (Table 1) In Africa, as a whole, 1984/85 status quo food aid need is only 180 thousand tons greater than in 1983/84. But, North Africa status quo food aid need for 1984/85 is down about 520 thousand tons, and West Africa need is up 460 thousand tons. The cumulative effect of drought in Southern Africa has been to keep import requirements high. Nearly 40 percent of the 1.9 million ton Southern Africa status quo import requirement will have to come through food assistance. The estimated status quo food aid need for Asia is 900,000 tons less in 1984/85 than in 1983/84, principally because of production gains by India. Import requirements are down in both South and Southeast Asia, but deterioration in Southeast Asia financial conditions results in sustained food aid needs. Import requirements have increased by 500,000 tons in Latin America, but food aid need has increased much less, principally because of sharply curtailed imports of other goods by financially pressed countries.

The countries needing the greatest quantities of food grain in 1984/85 to sustain recent (status quo) levels of food consumption are Egypt, at 2.8 million tons, the Philippines, at 1.4 million tons, and Bangladesh, at 526 thousand tons. Other countries needing between 300 and 500 thousand tons of food aid include Ethiopia, Madagascar, Mozambique, Somalia, and Tanzania.

Estimated nutrition-based import requirements and food aid needs have, on the whole, declined somewhat in the 67 developing countries studied. The reduction in nutrition-based food aid need was largely in Asia, particularly India, where import requirements dropped from 9.8 million tons to 6.8 million tons. India's nutrition-based aid needs dropped by 4.5 million tons,

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<sup>1/</sup> For a complete listing of countries covered, see the Table of Contents.

from 8.2 million to 3.7 million, a consequence of improved agricultural and financial conditions. Still, Asia leads other regions in nutrition-based food aid need. In addition to India, Bangladesh requires 5.1 million tons and Nepal 800,000 tons. In Africa, individual countries also continue to require large quantities of nutrition-based food aid. Ethiopia and Mozambique require more than 1 million tons. Kenya and Zaire require more than 800,000 tons. In Latin America, Bolivia and Peru require 450,000 thousand tons of nutrition-based food aid, Haiti requires nearly 300,000 tons, and Ecuador requires 328,000 tons.

The seriousness of the food aid needs of countries is better measured by the per capita level of required food assistance. Those countries requiring the greatest per capita status quo assistance are Jamaica, Lesotho, Mauritania, Guinea-Bissau, and South Yemen. The countries requiring the greatest per capita nutrition-based assistance are Cape Verde, Comoros, Guinea-Bissau, Chad, Mali, Somalia, and Haiti.

The continued poor financial situation of food deficit countries is the cause of many countries' inability to obtain their 1984/85 import requirements in commercial markets. Except for some growth in export earnings and in commercial imports, financial indicators worsened in 1983 -- including debt service payments, international reserves, the trade balance, the debt service ratio and the ratio of reserves to imports. The probable overall decline in the financial position of the low-income countries follows declines in 1981 and 1982. The expectation that it may take many countries several years of very favorable economic conditions to recover their financial positions of 1980 is reflected in estimated food aid needs. The large element of financial uncertainty, particularly as regards indebtedness and merchandise trade, causes food aid estimates to change frequently.

Indications are that world cereal production and stocks are ample to meet increased developing country import requirements. In fact, most of the exporters consider wheat supplies burdensome and are increasing the number of long-term export agreements and extending more credit. The United States 1984/85 acreage reduction program will be the third in as many years. Indications are that major exporters will reduce their 1984/85 support price, and lower domestic prices will be transmitted to world markets.

The favorable prospects for cereal supplies have not been matched by forthcoming global food aid assistance funding. Cereal food aid from major donors is expected to remain at 9 million tons in 1983/84, as it has since 1979/80. While total official development assistance (ODA) has risen from approximately \$9 billion in 1973 to nearly \$28 billion in 1982, the proportion consisting of cereals food aid has fallen from 12-13 percent in the mid-1970's to 9-10 percent in the early 1980's.

The United States funding of food aid has grown substantially and more growth is to come. For 1983/84, the program level for P.L. 480 Title 1/III is \$872 million, \$791 million of which is available for commodity programming. Allocations of \$764 million have already been made, with \$27.5 million being held in unallocated reserve. Some \$1.5 billion in total has been budgeted for fiscal 1984, and \$1.6 billion proposed for fiscal 1985. Congress has approved an additional \$90 million in fiscal 1984 to fund large-scale donations to drought affected African nations.

Food import requirements and aid needs for 1985/86 reflect the expectation of continued financial problems. However, the financial difficulties of at least some of the major recipients of food aid will be relieved. The economic capacity to import food is estimated to improve over 1984/85 by about 3.5 million tons and, assuming some relief from drought, 1985/86 status quo import requirements will be 1.7 million tons less and food aid needs about 2 million tons less than 1984/85.

Table 1. Grain equivalent import requirements and aid needs to support consumption, 1984/85

Region	Status Quo		Nutrition-based	
	Import Needs	Aid Needs	Import Needs	Aid Needs
thousand metric tons				
Total Africa	19647	7779	21551	10407
Sub-Saharan Africa	7706	4781	13422	10407
North Africa	11941	2998	8129	0
West Africa	2617	1560	4305	3209
Central Africa	869	269	1737	1135
East Africa	2236	1642	4517	3893
Southern Africa	1984	1310	2863	2170
Middle East	1357	237	1383	261
Total Asia	4969	2310	19050	12937
South Asia	2017	748	15335	10377
Southeast Asia	2952	1562	3715	2560
Total Latin America	4867	1419	5069	2162
Caribbean	1038	271	1250	485
Central America	797	362	830	449
South America	3032	786	2989	1228
Total All Regions	30840	11745	47053	25767



WORLD FOOD  
SITUATION AND  
OUTLOOK

Food Production  
Indicators

World food supplies have declined from the record levels of a year earlier, but remain relatively large. Production shortfalls are causing a serious food supply situation in several countries, especially in Africa. World crop production is expected to increase in 1984/85, but sharply lower carryin stocks will result in small gains in total supply. A sharp drop in coarse grain production, lower edible oil output, and reduced outtake of roots and tubers have resulted in a drop in world food supplies in 1983/84.

World cereal production has dropped 4 to 5 percent in 1983/84, with all the decline in coarse grains. The Payment-in-Kind (PIK) program and drought almost halved U.S. coarse grain output, compared with 1982/83. Drought continued to cause serious setbacks in South African corn production. Despite smaller U.S. and Soviet crops, world wheat production is expected to be up a little under 2 percent in 1983/84. The Australian crop more than doubled the drought-ravaged 1982/83 level, and the People's Republic of China (PRC) and India are showing significant gains in output.

World rice production has increased sharply in 1983/84, with most countries showing at least a small increase. Particularly large gains have been registered in India and the PRC. Since last October world edible oil production has been well below year-earlier levels and prices are sharply higher. Reduced Malaysian palm oil, an almost 30-percent decline in the U.S.'s 1983/84 soybean production, and lower cottonseed outturn by several major producers are the primary reasons.

Per capita food production in 1983/84 is around 4 percent below a year earlier (table 2), but most of the decline is concentrated in the developed countries. The developing countries are showing only a small decline in per capita production as record cereal production offset most of the decline in roots and tubers. However, in Africa generally dry conditions and pest infestations have resulted in around a 7-percent decline in 1983/84 per capita food production.

World demand for agricultural products has picked up in 1983/84, with economic growth in the industrialized and many middle-to-upper income developing nations. However, serious debt problems and foreign exchange shortages continue to constrain trade in many developing countries.

Also, reduced global coarse grain and oilseed production has resulted in higher prices for these commodities. Higher prices for coarse grains, generally sluggish demand for meat, and more favorable feed wheat prices are limiting gains in coarse grain trade and consumption.

Tight edible fat and oil supplies have caused a sharp runup in prices and lower world trade. U.S. soybean oil prices during October 1983-March 1984 were up two-thirds from a year earlier.

Table 2.--Indices of world and regional food production

	Total food production										Per capita food production									
	1977/78:	1978/79:	1979/80:	1980/81:	1981/82:	1982/83:	1983/84:	1977/78:	1978/79:	1979/80:	1980/81:	1981/82:	1982/83:	1983/84	(1969-71 = 100)					
Developed countries															(1969-71 = 100)					
United States	113	117	120	119	124	126	117	106	109	112	110	113	114	106						
Canada	118	119	125	118	131	132	110	110	110	114	107	117	117	96						
Western Europe	119	122	118	121	132	139	134	109	110	106	107	115	120	115						
Japan	109	116	119	124	122	126	124	105	111	114	119	116	120	118						
Oceania	106	105	105	94	96	98	99	98	95	95	84	85	87	87						
Rep. of South Africa	120	132	124	113	121	113	131	108	117	110	99	104	96	110						
	133	136	131	142	160	141	116	112	112	106	111	122	105	85						
Centrally planned countries															(1969-71 = 100)					
USSR	118	127	127	125	126	134	138	105	111	110	107	106	111	113						
Eastern Europe	114	123	114	112	108	115	120	107	115	105	102	98	104	107						
P.R. China	122	127	125	122	125	130	127	116	120	117	115	116	120	117						
	121	133	149	149	155	170	178	105	113	125	124	127	136	141						
Developing countries															(1969-71 = 100)					
East Asia 1/	125	131	131	134	141	141	144	106	108	105	105	108	106	105						
South Asia 2/	136	145	145	149	158	160	162	116	121	118	119	124	123	122						
West Asia 3/	120	125	118	122	131	127	141	103	105	97	97	102	97	105						
Africa 4/	134	142	141	143	142	148	147	109	113	108	108	104	105	102						
Latin America 4/	111	116	119	122	124	126	121	91	93	92	93	92	90	84						
	131	137	141	145	153	154	149	110	112	113	114	117	115	109						
World	118	124	125	125	129	133	131	103	107	106	104	105	107	103						

Note: Production reported on a calendar year basis; production data shown here are combined with split- or commodity-marketing-year data to develop a complete supply/demand balance. For example, 1980 output is associated with 1980/81 trade and disappearance data.

1/ Includes Southeast Asia regions shown in table 3.

2/ Includes Middle East regions shown in table 3.

3/ Includes North America, Central Africa, and East Africa regions shown in table 3.

4/ Includes Central America, Venezuela, Brazil, Argentina, and other South American regions shown in table 3.

On the other hand, ample supplies and lower prices have resulted in increased consumption of wheat and rice.

The outlook for 1984/85 world food supplies is mostly favorable (table 3). World grain production is expected to be up around 8 percent, but lower carryin stocks (table 4) mean supplies may be up only 3 percent. World wheat production is likely to be up around 2 percent, primarily because of larger output in the United States and the USSR, and continued gains in India. Although major exporters will have a surplus of exportable wheat, world prices will drop again, and world trade is expected to remain relatively flat. Coarse grain production will show the sharpest gains--maybe up 15 percent. The U.S., Canadian, and EC crops are expected to rebound, and with more normal rainfall, South African output could surpass the 8.8 million tons in 1981/82. However, with the 1984/85 coarse grain carryin projected to be over 50 percent below a year earlier, total world supplies may rise less than 5 percent.

World edible oil production is projected to recover from depressed 1983/84 levels, however, supplies will continue relatively tight and prices, while lower than in mid-1984, will remain above the average of the previous 3 years. Root and tuber production should also rebound from 1983/84 but continued problems with pest and disease in Africa will limit the gain.

Even if prices decline in 1984/85, some low-income countries may not be able to increase appreciably their commercial imports of basic food items. Total imports for the low-income countries are projected to increase by about 10 percent, which may be very optimistic given persistently high debt-service obligations, the historically low ratio of reserves to imports, and the possibility of continuing strength in the dollar.

Export earnings will likely increase in 1985-86, in contrast with 2 recent years of decline--1981 and 1982. The prospects for growth are based on the favorable outlook for increasing business activity and import demand in the industrialized countries at least through 1985. Export earnings for the low-income countries are expected to rise 8 percent in 1984, the highest growth rate since 1980. This can be expected to favorably influence commercial food imports.

Large debt-service obligations will continue to constrain the abilities of many low-income countries to allocate scarce foreign exchange toward increased imports. As a percentage of exports, debt-service payments averaged 20 percent during the base period. In 1984, obligations on the medium and long term debt contracted by the end of 1982 could reach 26 percent of exports--based on an 8-percent growth in exports. If all debt-servicing obligations are met, a larger share of foreign exchange earnings could be diverted from imports and reserve accumulation.

Table 3.--Total cereals: World production, consumption, and net imports <sup>1/</sup>

	1981/82			1982/83			1983/84 <sup>2/</sup>			1984/85 <sup>2/</sup>		
	Produc- tion	Consump- tion	Net imports	Produc- tion	Consump- tion	Net imports	Produc- tion	Consump- tion	Net imports	Produc- tion	Consump- tion	Net imports
	Million metric tons											
Developed countries	578	422	121	584	435	-106	461	427	-111	573	430	-120
United States	331	182	-109	336	199	-97	207	189	-96			
Canada	51	24	-25	53	24	-27	48	24	-27			
EC	123	119	-5	132	118	-10	124	119	-7			
Other Western Europe	-27	41	13	31	41	19	31	41	10			
South Africa	11	11	-3	7	11	3	7	11	4			
Japan	10	36	23	10	36	24	11	36	24			
Oceania	25	9	-16	14	8	-8	33	7	-19			
Centrally Planned countries	90	64	69	548	597	49	578	618	44	573	623	50
Eastern Europe	95	106	10	107	109	3	101	104	4			
USSR	154	203	45	104	206	31	185	211	30			
P.R. China	241	256	14	267	283	15	293	303	10			
Developing countries	431	478	50	419	486	51	440	503	61	451	524	65
Mexico/Central America	24	31	4	18	29	9	21	29	9			
Venezuela	1	4	3	1	4	3	1	4	3			
Brazil	32	35	4	27	34	4	29	34	4			
Argentina	27	11	-15	33	11	-21	30	11	-20			
Other South America	9	13	4	9	13	4	8	13	5			
North Africa/Middle East	55	82	30	56	86	28	53	88	34			
Central Africa	24	30	6	25	31	6	21	28	6			
East Africa	10	12	2	10	12	1	10	12	2			
South Asia	161	163	3	152	157	4	173	172	6			
Southeast Asia	36	29	7	36	30	6	37	31	-7			
East Asia	45	61	16	44	63	18	46	66	18			
Rest of world	7	7	0	8	16	0	11	15	0			
World total	1,499	1,464		1,551	1,518		1,479	1,548		1,597	1,577	

Note: Totals may not add because of rounding.

<sup>1/</sup> Regional totals include some high-income developing countries not treated in this report.<sup>2/</sup> Forecast.<sup>3/</sup> A negative figure indicates net exports.

Source: USDA/ERS.

Table 4.--Cereal carryover stocks

	1969/70	1981/82	1982/83	1983/84	1984/85
	1971/72			Preliminary:	Forecast
World					
-million tons	185.0	219.4	253.6	184.6	204.7
as a percent					
of consump-					
tion	16.3	14.9	16.7	11.9	13.0
U.S.					
-million tons	67.5	101.8	142.5	65.4	87.2



Cereal  
Situation  
and Outlook

Per capita cereal production and consumption in the developing countries have increased in 1983/84 after falling a year earlier because of reduced production. Increased production, as well as larger imports, have caused stocks to rise. Furthermore, import prices for wheat and rice, declined in 1983/84 (table 5). Cereal imports as a percent of consumption--a measure of trade dependence--continue to trend upward and will be around 20 percent in 1983/84. Foreign exporters have sold more grain to the developing countries than last year. While U.S. sales have fallen, they are expected to be only slightly below last year's record, and represent about a 50-percent market share.

Global cereal supplies are generally adequate in 1983/84, especially those grains imported by the developing countries. In fact, most exporters have burdensome wheat supplies. Total cereal trade in 1983/84 is forecast at 205 million tons, 10 million below the 1980/81 record. To reduce supplies, many exporters have extended or increased the number of long term trade agreements and/or offered more credit at easier terms. Rice supplies are at record levels in 1983/84 and world prices generally lower. Coarse grains are in short supply because of the drought-reduced corn crop in the United States and South Africa, and smaller barley crops in Canada and the European Community. Imports of coarse grains by the developing countries remain near record levels, but prices are higher.

Total cereal production in the developing countries reached a record high in 1983/84, with increased output of wheat, coarse grains, and rice. While below record levels, grain production has increased slightly in Latin America, as shortfalls in wheat outweigh an increase in coarse grains. In Africa and the Middle East, wheat and coarse grain output is lower because of generally dry conditions. Asian production has risen 10 percent, following a 4-percent decline the previous year. Large gains are being registered in Asia's wheat and coarse grain production, with record output for these grains and rice.

Of the 67 low-income countries analyzed in detail later in this report, 10 import more than 1 million tons of cereal a year, for a total of 25 million tons, or roughly three-fourths of the total. Egypt is by far the largest importer--with an estimated 8 million tons for 1983/84--and the largest U.S. recipient of concessional exports. India is the next largest importer, but it's needs are sporadic. In 1983/84, India has imported large amounts of wheat and rice; but next year may import only rice. Other large cereal importers include Morocco, Indonesia, Bangladesh, Peru, and Colombia, Philippines and Tunisia, and their imports are generally constant or increasing.

Global stocks are important to food security in the developing countries; stocks tend to absorb some of the variations in production and consumption. Global rice stocks are low relative to other grains, and since rice is usually consumed where it is grown, little is traded. In many of the rice-growing countries year-to-year changes in production are mirrored in consumption changes. Most of these countries have low per capita food



consumption levels and cannot afford to withhold stocks from the market. For the developing countries as a whole, rice production in 1983/84 is favorable and is expected to increase in 1984/85. Relative to consumption, global wheat stocks are the highest. Wheat stocks equal about 2.5-month supply, but rice stocks are less than 1 month. While coarse grain stocks usually equal a 1.5-month supply, lower 1983/84 production has reduced stocks to under a month's supply--the lowest on record. Nevertheless, total cereals are in a large enough supply to meet world import demand.

With the likelihood of large global supplies of wheat, coarse grains, and rice, an increase in trade, and an expected decline in world cereal prices, per capita cereal consumption will likely increase in 1984/85.

Table 5.--Selected world cereal and oilseed prices

	Marketing:						
	year	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85
						Forecast	Forecast
	Dollars per metric ton						
Wheat, #2, HRW, f.o.b. U.S. Gulf ports	June/May	173	181	172	158	153	140-160
Rice, broken, f.o.b. Bangkok Thailand	Aug/July	411	492	333	271	271	260-300
Corn, f.o.b. U.S. Gulf ports	October/ September	122	144	113	126	145	120-140
Soybean oil, Decatur	October/ September	536	495	417	455	728	575-725

## Root and Tuber Situation

Roots and tubers such as cassava, potatoes, sweet potatoes, and yams provide as much as half of the total food intake in many tropical developing countries. Since little is traded on world markets, year-to-year production swings have a dramatic impact on many low income countries' food situation, and, therefore, on their food import requirements and aid needs. Global root and tuber production declined a little more than a million tons in 1982/83--the equivalent of 500,000 tons of cereal. But much larger declines occurred in 1983/84 (Table 6). Drought in the Andean countries was the major reason for the 1.5-million tons decline in 1983/84 potato production. Sweet potato and yam output has dropped about a million tons, as a lower outturn in Africa more than offset a larger crop in Asia. Cassava production is likely to be 4 million tons lower in 1983/84, with one-third of the reduction coming in Latin America and the remainder in Africa. The 6.5-million-ton reduction in global root and tuber production is the caloric equivalent of over 2 million tons of wheat--or more than 2 kilograms of wheat equivalent per person.

The developing countries' root and tuber output is expected to increase slightly in 1984/85. However, population gains will be much stronger than outlet gains, causing per capita output to slip another 0.5 kilograms. The decline in per capita food use will not be as large, since the production estimates reflect declining production in some countries that normally use much of their cassava for nonfood purposes.

The root and tuber situation in the individual African, Asian, and Latin American regions differs somewhat because of production and use differences. Roots and tubers play a particularly critical role in Africa, where they account for as much as two-fifths of total food intake. Widespread drought and pest infestations caused some severe production shortfalls: some countries have experienced 30-to 50-percent declines. For example, Ghana's cassava production may be down 60 percent from 1981 levels, with maybe a 30-percent decline in yam output. In 1983, Africa's per capita root and tuber output has been estimated 9 percent less than a year earlier.

Table 6.--Root and tuber production in the developing countries 1/

	:1969/70 :	:	:	:	:	:
	:1971/72 :	1980/81 :	1981/82 :	1982/83 :	1983/84 :	1984/85
	: average :	:	:	:	:	:
	<u>Million metric tons</u>					
Latin America	: 48.5	41.6	44.2	43.5	40.5	40.6
Africa	: 66.6	80.7	80.5	82.1	77.1	78.1
Asia <u>2/</u>	: 35.0	43.9	45.6	43.4	44.9	44.7
Total	: 150.1	166.2	170.3	169.0	162.5	163.4
Wheat equiv. <u>3/</u>	: 50.0	55.3	56.8	56.3	54.2	54.5
Per capita wheat equiv.	: 32.5	28.3	28.4	27.5	25.8	25.3

1/ Includes non-food aid developing countries not treated in this report.

2/ Does not include Thailand or the PRC.

3/ Assumes 1,000 cal./kg. for roots and tubers and 3,000 cal./kg. for wheat.

Output gains in 1984/85 will be limited by pests and diseases. Thus, per capita production may fall another 2 percent.

Root and tuber production in Asia may slightly decline in 1984/85, mainly because of shortfalls in Indonesia. Output in the region increased around 1 million tons in 1983/84, after falling in 1982/83. Since these figures do not include Thailand, they generally reflect changes in local use. On a per capita basis, 1983/84 use is up about 1 percent, but may drop by 2 to 3 percent in 1984/85.

Latin America production in 1984/85 is expected to remain near the 1983/84 level, when it dropped by about 3 million tons. Drought sharply reduced potato production in the Andean region and Brazil is continuing to shift land out of cassava, and into sugarcane. Although per capita output may fall 2 percent in 1984/85, much of this drop will be due to an expected lower cassava area in Brazil. Food use per person may actually be larger than in 1983/84.

Vegetable Oil  
Situation and  
Outlook

Edible vegetable oils provide a substantial portion of daily caloric needs and are a source of essential fatty acids in the diets of people in many low- and middle-income nations. In 1983/84, prices for vegetable oils have increased sharply because of production declines. Importers in the developing countries have had to limit consumption growth, given the higher prices and limited available foreign exchange.

World edible vegetable oil production for 1983/84 is estimated at 41.8 million tons, almost 1.5 percent below 1982/83. However, since the fall of 1983 the world's vegetable oil supplies have been much tighter than the year-to-year comparisons in Table 7 indicate. Because of the method used to aggregate the various types of oils, with their varying harvest periods, harvest shortfalls in 1983 are accounted for under different crop years. The 1983 declines in Malaysian palm oil and Philippine coconut oil are counted as part of 1982/83 production. On the other hand, the short U.S. soybean crop, harvested in late 1983, falls into the 1983/84 crop year. Hence, the 1.5-percent decline underestimates the tight world vegetable oil situation. A better indicator is the level of ending stocks for 1983/84; less than 1 month's supply.

Malaysian palm oil production totaled only 3.0 million tons in calendar 1983, compared with 3.5 million tons in 1982. As a result, Malaysia's palm oil stocks were nearly two-fifths below 1982 levels by September 1983. As palm oil supplies dwindled, the drought-reduced U.S. soybean crop was expected to reduce world soybean oil stocks. Consequently, most vegetable oils prices have been sharply above year-earlier levels. Soybean oil prices in Rotterdam during October 1983-March 1984 were 70 percent higher, with further rises expected through the summer. Palm oil prices and coconut oil prices more than doubled because of drought-reduced 1983 crops.

Peanut oil production has increased in 1983/84, primarily because of a record Indian peanut crop. Peanut production in Africa is still suffering from drought. Olive oil, produced mainly in southern Europe and North Africa is down sharply from 1982/83 levels.

Currently strong U.S. domestic vegetable oil demand may bid soybean oil supplies away from exports. U.S. soybean oil exports for 1983/84 are expected to fall 19 percent.

India's large 1983/84 oilseed crops have provided much of the country's domestic needs. Vegetable oil import requirements are lower, but soybean oil will capture a larger share of the total. Contrary to normal price relationships, palm oil is currently costly relative to soybean oil. India has even purchased some sunflowerseed oil, a premium quality oil, because it was favorably priced.

Sunflowerseed oil has replaced cottonseed oil in several markets, including Egypt, because U.S. cottonseed oil production was down sharply and prices for sunflowerseed oil have been more favorable.

The outlook for 1984/85 is for increased vegetable oil supplies. The U.S. soybean crop is estimated at almost 30 percent above 1983/84. This is expected to translate into a 7-percent gain in soybean oil output. However, increased U.S. use will take part of this gain. Palm oil output in Malaysia is expected to recover somewhat, and exports could resume during the summer of 1984. Brazilian and Argentine oilseed output are likely to increase slightly, particularly if Brazil's soybean yields improve. Therefore, 1984/85 prices should subside somewhat from current high levels as stocks are replenished. Lower prices will enable cash-poor countries to increase imports.

Table 7--World Supply and Use of Vegetable Oils (edible) 1/

	: : 1980/81	: : 1981/82	: : 1982/83	: : 1983/84 <u>1/</u>	: : 1984/85 <u>2/</u>
	: :	: :	: :	: :	: :
	<u>Thousand metric tons</u>				
Beg. stocks	: 3,583	: 3,783	: 3,659	: 3,689	: 2,974
Production	: 38,197	: 40,648	: 42,333	: 41,758	: 43,500
Imports	: 11,040	: 11,993	: 12,460	: 12,112	: 12,300
Consumption	: 37,546	: 40,368	: 42,066	: 42,052	: 43,000
Exports	: 11,491	: 12,397	: 12,697	: 12,533	: 12,700
End. stocks	: 3,783	: 3,659	: 3,689	: 2,974	: 3,474

1/ Includes soybean, palm, sunflowerseed, rapeseed, cottonseed, peanut, coconut, and palm kernel.

2/ ERS estimates.



Food Aid  
Availabilities  
and Outlook

Total cereal food aid from major donors is expected to remain around the 9-million-ton level contributed consistently, with few exceptions, over the past 10 years. Small, steady increases on the order of 1-2 percent annually may continue if low world grain prices remain in effect. Total cereals aid increased from 8.89 million tons in 1979/80 to 9.18 million tons in 1982/83. Current FAO estimates for 1983/84 suggest about 9.14 million tons total cereals food aid, 45,000 tons lower than cereals aid the previous year and nearly equal to disbursements in 1981/82 (Table 8).

Other food aid, in the form of vegetable oil and dairy products, has been less constant than cereals aid. Vegetable oil shipments, rose from 256,000 to 327,000 tons in 1980/81, fell to 267,000 tons in 1981/82 and then rose once more to 339,000 tons in 1982/83.

Dairy product food aid--mostly skim milk powder, but also other milk products containing protein--has risen from 200,000 tons in the mid-1970's to 334,000 tons in 1980/81. However, it is unclear whether major donors intend to continue dairy aid in amounts closer to 250,000 tons--evident in the late 1970's as well as in 1982/83--or whether they will increase such aid to the 1980/81 and 1981/82 levels of 300,000 tons and more. The United States generally supplies about one-third of this dairy food aid and the EC provides most of the balance. The debate on food aid in the EC, regarding developing country food aid needs and surplus dairy disposal, will determine to a large extent the future volume of dairy food aid shipments.

Developed countries have responded in a variety of ways over the past 10 years to help developing countries import needed goods and services. Total official development assistance (ODA) contributions rose from approximately \$9 billion in 1973 to nearly \$28 billion in 1982. However, as a portion of all ODA, food aid in the form of grains (inclusive of OECD Development Assistance Committee (DAC) member contributions to multilateral agencies, although not their actual disbursements) fell slightly from 12-13 percent of ODA disbursements in the mid-1970's to 9-10 percent in the early 1980's. The lowest was 8.4-percent of total ODA in 1982.

Multilateral control of food aid disbursements climbed steadily from around 15 percent of total food aid under multilateral management in 1972 to over 25 percent of food aid shipments in 1982.

United States

The 1982/83 P.L. 480 exports totaled 6.23 million tons worth \$1.2 billion--4.15 million tons under Title I/III (\$809.7 million) and 2.08 million under Title II (\$397.7 million).

For 1983/84, the program level for P.L. 480 Title I/III is \$872 million, \$806 million of which is available for commodity programming. Allocations of \$793 million have already been made, with \$13 million being held in unallocated reserve to meet additional food assistance needs. Some \$1.6 billion has been budgeted for fiscal 1984, and \$1.7 billion is proposed for



fiscal 1985. Congress has approved an additional \$150 million in fiscal 1984/85 to fund large-scale food donations to drought affected African nations. At this time, a supplemental bill pending in Congress would authorize an additional \$175 million for Title I/III in 1985.

During the first half of 1983/84, \$617 million in food aid was shipped under Title I/III, which amounted to 3,291,717 tons at a unit cost of \$187 per ton. In 1970, total U.S. food aid of \$1.033 billion (total agricultural exports less commercial agricultural exports, shipped mostly under P.L. 480) represented 34 percent of its 1970 ODA contribution of \$3 billion. In 1980, U.S. food aid of \$1.390 billion represented 20 percent of its 1980 ODA contribution of \$7.1 billion, suggesting the increased channeling of once bilateral aid into multilateral channels.

Since 1981, the United States has maintained a 4-million-ton Food Security Wheat Reserve to ensure that wheat will be available for P.L. 480 programming during periods of reduced domestic availabilities. This reserve serves as a guarantee of the U.S. pledge of 4.47 million tons of grains annually under the Food Aid Convention (FAC), amounting to nearly 60 percent of FAC member contributions.

#### Japan

Japan has undertaken two programs to double its overseas development assistance, the first during 1976-80 and the second during 1981-85. Progress was disappointing in 1981 and 1982 for a number of reasons. Major constraints were the Japanese domestic budget and the weaker purchasing power of the yen against the U.S. dollar (which limited Japanese purchases of U.S. commodities to give as food aid). Japanese aid contributions to multilateral agencies were also delayed, awaiting similar U.S. appropriations.

Japan has declared it will attach increasing importance to agricultural development in its international assistance program, which is almost entirely bilateral aid. The Japanese draft budget for fiscal 1984 (April-March) contains a 7.9-percent increase in its economic cooperation title, to 543 billion yen.

Japan's food aid contributions traditionally consist of exporting rice, plus wheat and other products purchased from surplus countries such as the United States. Japanese rice was either granted outright or sold on concessional terms; the latter typically involved a 10-year grace period and 20 years to pay, with a 2-percent interest rate during the grace period and 3 percent thereafter.

Japan will have approximately 40,000 tons of rice available for export during fiscal 1984 under its grant aid program, although no concessional rice export sales are expected. This contrasts with the approximately 400,000 tons of surplus rice available



for export annually during the 5-year Japanese surplus rice disposal program which ended March 31, 1984, as prescribed under the 1980 U.S.-Japan Rice Agreement.

In calendar 1983, Japan provided Y9.82 billion in food aid, of which Y3 billion provided Burmese, Thai, and Pakistani rice to Bangladesh, and Y2.2 billion went to the U.N. World Food Program (WFP) for Afghan and Cambodian refugees. The balance provided Japanese rice as food aid to African countries such as Cape Verde (Y610 million), Somalia (Y539 million), Senegal (Y498 million), Zambia (Y476 million), and Mozambique (Y464 million). Japanese food aid also included U.S. wheat bought for contribution to the WFP and to several African countries.

European  
Community

The 1984 EC food aid package totals ECU 783 million, destined for 74 possible beneficiaries. (The EC Council has recently included spaghetti and macaroni on the list of products to be made available as aid.) Food aid products include cereals (927,000 tons as a first allotment, with 200,000 tons maximum as a second), milk powder (122,500 tons), butteroil (32,000 tons), sugar (13,600 tons), vegetable and olive oil (20,000 tons), and other products including dried vegetables and fish (147,000 tons).

The minimum annual cereals commitment of the EC and its member countries between 1983/84 and 1985/86 under the Food Aid Convention is 1.65 million tons, 56 percent provided by the Community as a whole and 44 percent by member nations. EC aid contributions are funded partly out of the EC's development aid fund and partly from the Common Agricultural Policy budget. Food aid contributions made under the Community's aegis are eligible for export subsidies, whereas individual member contributions are not.

The EC Development Council is attempting to shift EC food aid policy away from being a mechanism to dispose of Community surpluses--particularly dairy products which accounted for about two-thirds of 1982 programmed food aid--to a system that would link EC food aid with food and agricultural development strategies in the less developed countries (LDC's).

In November 1983, the Council defined various guidelines for EC food aid policy to achieve this integration including: (1) the possibility for multi-annual food aid programs following discussions with recipients about products, quantities, uses of aid and counterpart funds that the aid might generate; (2) diversification of aid products with priority to those needed by recipients, not necessarily those in surplus; (3) increased use of local products; and (4) greater use of counterpart funds. The Council also adopted guidelines for the allocation of EC financial and technical aid to nonassociated LDC's in 1984.

Canada

Canada provides food aid to developing countries through three channels: (1) direct bilateral agreements with the recipient country; (2) multilateral agencies of the United Nations

(primarily the World Food Program); and (3) Canadian nongovernmental organizations.

Canada is increasing its food aid budget by more than 11 percent in 1984, to C\$362.5 million. Most (C\$194.5 million) will be used bilaterally to send food to 20 African nations suffering their worst drought in decades. The WFP will receive C\$125 million in food and cash.

Canadian wheat and wheat flour comprise the bulk of Canada's food aid, although Canada also sends large quantities of milk powder, edible oils, and other staples. In 1982/83 (August-July), wheat and wheat flour food aid shipments amounted to 785,050 tons--449,574 shipped bilaterally; 317,586 tons multilaterally through the WFP; and 12,950 tons channelled through nongovernmental organizations.

#### Australia

In 1982/83, some A\$112 million was provided as food aid. The minimum Australian pledge under the 1980 Food Aid Convention (FAC) is 400,000 tons annually. While maintaining a substantial bilateral food aid program, Australia has stated it will rely increasingly on the U.N. World Food Program to distribute and monitor its food aid program. In 1982, 30 percent of Australia's FAC commitment will be channeled through the WFP, increasing to 50 percent by 1984/85.

In addition to its FAC commitment, Australia provides a 50,000 ton allocation to the International Emergency Food Reserve (IEFR), administered through the United Nation's World Food Program (WFP). The IEFR was established in 1976 as a mechanism to attempt improvement of donor coordination during emergency situations and to avoid disruption of targeted feeding programs stemming from the diversion of resources to emergency needs.

In 1983/84, Australia foresees providing 330,000 tons of wheat and wheat equivalent food aid.

FOOD AID  
NEEDS OF LOW  
INCOME  
COUNTRIES

Financial  
Situation in  
the Low-Income  
Countries

The financial resources of low-income developing countries declined again in 1983, but apparently less severely than in 1981 and 1982. In fact, there were some improvements, particularly in export earnings. Moreover, the continuing recovery in the industrialized countries and their relatively low rates of inflation suggest that export earnings from the low-income countries will continue to increase and that the rise in import costs will be moderate. Thus, although the ability to import food commercially declined in 1983, it could rise in 1984 and 1985. Fairly slow growth in exports, persistent high debt-servicing obligations, and the continuing need to rebuild reserves will probably limit the countries' ability to raise their commercial food imports over the next 1 to 2 years.

Export earnings increased an estimated 1 percent in 1983, after declining by 8 percent in 1982 and 1 percent in 1981. Imports increased an estimated 7 percent after declining 3 percent in 1982. The merchandise trade deficit consequently grew 24 percent as compared to 20 percent in 1982 and 80 percent in 1981.

The decline in international reserves moderated to 5 percent, following decreases in 1982 and 1981 of 13 percent and 18 percent, respectively. International interest rates declined by about 4 percentage points--to under 10 percent--in 1983, and averaged lower than at any time since 1979. Debt-servicing costs on private debt, then, found some reprieve in the lower interest rates.

Thus, the financial situation may not seem as bleak in the low-income countries as a group in 1984 as it did a year ago. The downward paths of many financial indicators may be ending, especially in the light of recovery in the industrialized countries. Economic growth in the industrialized countries could reach close to 4 percent this year and 3 percent in 1985. Export values of the developing countries may increase 8 percent in 1984 and by more than 9 percent in 1985. Continuing improvement in the balance sheets of international banks and in financial conditions in the low-income countries will probably cause lending to developing countries to begin growing again.

Yet, certain conditions suggest persistent financial difficulties. First, except for the growth in export earnings and imports in 1983, all other indicators worsened--debt service payments, international reserves, the trade balance, the debt service ratio, and the ratio of reserves to imports. Therefore, the financial position of the low-income countries probably declined in 1983. Second, this probable decline followed decreases in 1981 and 1982. These continued declines suggest that it may take several years of very favorable economic conditions for the low-income countries to recapture the financial position they held in 1980.

Reduced exports and international reserves, and increasing debt service payments worsened Latin America's financial position in 1983. Exports and reserves both slumped to pre-1979 levels. The South America subregion accounted for the bulk of the export reduction; lowered export volumes and continued weak prices for metals were the major contributing factors. The reduction in exports and the slight increase in debt-service obligations raised the subregion's debt-service ratio to 43 percent. Debt-servicing obligations rose fastest in the Central America subregion--44 percent. This increase, coupled with a 5 percent decline in exports, raised the subregion's debt-service ratio from 22 percent in 1982 to 33 percent in 1983.

Asian countries, as a group, appeared to fare better than others during 1983. Asian exports rose more than other regions, although only 3 percent. The trade deficit declined, bringing Asia closer toward surplus; and the level of international reserves increased. Interpreting the data on debt-servicing obligations is particularly difficult in Asia given that the Philippines, which is a major economy in the region, did not meet its schedule of payments in 1983 and will reschedule its payments due in 1984 and 1985. The Southeast Asia subregion, which includes Indonesia and the Philippines, fared worse than the Asia average, particularly in export earnings and international reserves. Exports increased marginally and reserves declined by more than 7 percent. In South Asia, India's financial situation has improved substantially, with both trade and current account deficits declining (Table 9).

FOREIGN  
EXCHANGE  
EARNINGS

Recovery in the industrialized countries has already begun to benefit the low-income countries, particularly through trade. For more than a year before third quarter 1983, the industrialized countries' imports lagged year earlier levels. In the third quarter, however, imports nearly equaled the third-quarter 1982 level and by the fourth quarter, they were 6.5 percent higher than in 1982. Now that the recovery is picking up in Europe, import growth in the industrialized countries will likely accelerate over 1984.

The surge in imports of the industrialized countries reflects increased exports by both low-income and industrialized countries. The rise in exports caused prices for internationally traded commodities to advance for the first time since 1980. The index of prices published by the International Monetary Fund increased 6.7 percent in 1983 over 1982 and 16 percent from fourth quarter 1982 to fourth quarter 1983. The major gain was in food commodities, 26 percent (fourth quarter to fourth quarter); agricultural raw materials, 21 percent; beverages, 16 percent; and metals, 1 percent. However, at the end of 1983, commodity prices averaged 15 percent below their 1980 highs; metal prices averaged 25 percent below 1980.



Table 9.--Selected financial data for developing countries, 1983 estimates and forecasts for 1984 and 1985

Region and subregion	Yearend reserves			Imports			Exports			Debt Service		
	1983	1984	1985	1983	1984	1985	1983	1984	1985	1983	1984	1985
	Million dollars											
North Africa	1,350	1,333	1,453	22,820	24,121	26,153	16,277	17,303	18,716	4,215	4,286	4,401
West Africa	756	800	862	7,804	8,732	9,576	5,290	5,679	6,217	1,281	1,346	1,414
Central Africa	199	215	235	2,255	2,330	2,645	2,725	2,933	3,197	1,078	1,003	955
East Africa	819	688	756	6,321	7,111	8,954	3,846	3,413	3,844	846	844	896
Southern Africa	280	258	280	3,092	3,353	3,721	2,505	2,664	2,945	868	837	828
Middle East	3,226	3,487	3,778	8,623	9,854	11,289	5,915	5,837	5,903	256	282	300
Subtotal	6,630	6,781	7,364	50,915	55,501	62,338	35,896	37,829	40,822	8,544	8,598	8,794
South Asia	6,570	6,497	7,216	24,986	26,606	28,177	15,484	17,036	18,625	2,558	2,752	3,159
Southeast Asia	4,560	5,023	5,508	26,450	27,657	29,730	25,119	26,890	29,204	5,453	5,814	6,367
Subtotal	11,130	11,970	12,724	51,436	54,263	57,907	40,603	43,926	47,829	8,011	8,566	9,526
Caribbean	196	193	200	2,785	2,870	3,080	1,796	1,930	2,070	712	739	751
Central America	453	474	500	4,655	5,173	5,610	3,464	3,710	5,957	1,147	1,208	1,207
South America	4,552	4,770	5,010	10,134	10,540	11,628	9,265	10,486	11,763	3,936	4,207	4,222
Subtotal	5,201	5,437	5,710	17,574	18,583	20,318	14,525	16,126	17,790	5,795	6,154	6,180
Grand total	22,961	24,188	25,797	119,925	128,347	140,563	91,024	97,881	106,441	22,351	23,318	24,500

Commodity prices may continue increasing through 1984, but at a rate well below last year's 16 percent. Some analysts project that prices will rise by about 5 percent in 1984. If the price surge during the 1976-77 recovery is any guide, prices could flatten out after the second quarter of 1984. The projected slowing of the recovery in the industrialized countries over 1985 suggests minimal price increases that year.

Exports for the low-income regions as a group are projected to increase about 8 percent in 1984 and by 10 percent in 1985, based upon expected world economic growth and export unit values for the low-income regions. Continuing recovery in the industrialized countries will likely lead to higher growth rates for imports. Much of the increase in import demand will be directed toward goods whose consumption is responsive to changes in income. Thus, the exporters of manufactured items and consumer goods--the middle-income countries--will likely benefit the most, there will be gains for the low-income developing countries as well.

Latin America's exports are projected to grow faster than the developing country average export growth. This outlook is based primarily on the relatively high proportion of exports to the United States and on the assumption that the region's export price deflator will slow. However, two major factors may cause exports to be lower than projected. First, in Central America, internal conflicts could slow production and disrupt transportation. Second, several of Latin America's biggest economies will continue to restrict imports to conserve foreign exchange. These measures could translate into weakened export growth for other countries in the region.

Nontrade sources of foreign exchange likely will increase at low rates. These sources include investment, aid, banking flows, and worker remittances. Banking flows may increase in 1984 or 1985--after declining in 1983--but creditors will likely remain extremely cautious in extending funds.

Thus, only countries with good outlooks for export earnings and strong financial positions are likely to receive increased banking flows. Worker remittances have slowed since 1980 and will likely rise slowly or decline through 1985. Petroleum prices are apt to remain stable in real terms. Sluggish prices and export volumes for petroleum exporters--the major employers of foreign workers--will probably limit their hiring of foreign workers.

#### IMPORT BILLS

In most low-income countries, imports are considered to be at their lowest sustainable level. If this is true, population increases alone would dictate an increase in imports. Any continuation or worsening of drought in Africa would increase food imports, hence, total imports, as in 1983. Yet, imports will be constrained by persistent shortages of foreign exchange, continuing high debt-servicing obligations, and slow growth in reserves. The dollar is expected to remain high against foreign currencies over the next 2 years. Even if it

it depreciates against major currencies, it will probably remain strong against those of most low-income countries. This suggests that the purchasing power of most low-income countries will increase slowly at best.

If projections prove true that petroleum prices will decline in real terms in 1984 and remain constant in real terms in 1985, most countries will continue to be able to allocate scarce foreign exchange to other necessities. If the dollar depreciates against the low-income countries, petroleum prices expressed in the currencies of those countries would decline. In short, petroleum costs are not likely to represent an increasing share of outlays, as they did in the late 1970's.

#### Debt-Service Obligations

The source for the debt-service data presented in this report is the World Debt Tables published by the World Bank. The large number of debt reschedulings over the past several years has made the job of compiling accurate and updated data on debt service obligations very difficult. This difficulty is illustrated by the fact that the projectors for some countries reported in the World Debt Tables are already obsolete because the countries have rescheduled payments on their international debts since the data were co-piled or because the terms of existing arrangements were unknown at the time of publication. The affected countries include the following: Liberia, Madagascar, Malawi, Mali, Morocco, Niger, Senegal, Sierra Leone, Sudan, Togo, Uganda, Zaire, and Zambia in Africa; the Philippines in Asia; and Bolivia, Costa Rica, the Dominican Republic, Ecuador, Honduras, Jamaica, and Peru in Latin America.

Debt-service obligations rose 24 percent in 1983 from what was actually paid in 1982. This compares with a 12.5 percent increase in debt-service payments in 1981 and 1982. For Africa and the Middle East, debt-service obligations advanced 40 percent last year over what was actually paid in 1982. The large increase does not reflect an increase in the amount that countries will pay to service their debts, but rather, how much more a country would pay if it were to completely service its debts. Some of this discrepancy is accounted for by countries that reschedule their loans. In that case, a country will typically repay a greater total in smaller installments over longer periods. The other major part of the discrepancy is accounted for by countries that accumulate arrears on their debt; they repay less than the obligated amount. The portion that is not repaid the year it is due is either rescheduled over a later period or eventually written off by the creditor.

Thus, it is extremely difficult to interpret the projections of debt-service obligations. While the status of debt is known for 1982, the final debt picture for fiscal 1983 is unknown.

For some countries the figures overstate the real burden, because of reschedulings or arrears, and for some countries the figures understate the real burdens, because the figures do not include payments on debt due within one year. Still, it appears the low-income countries face very burdensome debt-servicing loads. Estimates for 1983 suggest that the debt-service ratio (debt-servicing payments to merchandise exports) for all regions averaged 27 percent, up from 22 percent in 1982. Latin America's debt-service ratio, at 40 percent, was the highest and Asia's, at 20 percent, was the lowest. Africa's debt-service ratio is estimated to have been 30 percent in 1983. Debt-service ratios are likely to decline if exports increase as projected, but they will remain high by historical standards. Debt-service payments might increase more than projected if interest rates continue rising. The portion of the debt of low-income countries that is tied to short-term interest rates is smaller than for middle-income countries, but overall payments would still increase if interest rates rise.



Commercial  
Capacity to  
Import Food

Several alternative methods are available to convert the general financial indicators treated above into precise measures of the low-income countries' capacity to import food.

The calculation used in this study is based on estimates of each country's foreign exchange earnings, import bills, foreign exchange reserves and debt service, and historical commercial food import patterns and food import unit values. Estimates of a country's foreign exchange earnings were made on the basis of export trade forecasts and, in selected cases, other sources of earnings such as worker remittances and tourism. The foreign exchange earnings estimate was added to estimates of a country's foreign exchange reserves to arrive at total foreign exchange supplies. The total was then adjusted downward using historical and estimated import bills to maintain the country's historical reserves-to-imports ratio.

The adjusted foreign exchange availability estimate was reduced further by the country's debt-service obligations to arrive at a net foreign exchange availability. The proportion of this net foreign exchange availability allocated to commercial food imports in the base period was held constant and used to calculate the foreign exchange available in the forecast period for commercial food imports. The volume of imports that could be purchased is estimating using this final estimate of net foreign exchange availability and expected food import unit values.

Measures of  
Food Aid Needs

CONCEPTUAL  
FRAMEWORK

The financial indicators noted above and the food data described below are used to generate two alternative measures of food aid needs. Each measure highlights a different aspect of the food problem in the low-income countries and a different notion of the role aid might play in easing the problem. (For a more detailed discussion, see section entitled "Methodological Notes.")

The first measure, termed "status quo," estimates the food aid needed to maintain per capita intake of food staples at the levels reported over the last 4 years. This measure is based on the notion that food aid might be allocated at least to maintain current consumption levels. No provision is made either for improving substandard diets, for reducing allocations to countries where diets are relatively good or for correcting problems related to the uneven distribution of food across or within countries. Because status quo estimates support a level of per capita availability that has been achieved in the past; in most cases they can be considered to be consistent with minimum capacity of countries to absorb food aid.

The second measure, termed "nutrition-based," estimates the food aid required to raise per capita caloric intake to the levels associated with FAO's recommended minimum diet. This measure is based on the notion that food aid might be allocated in a way consistent with nutritional need rather than to maintain a

recent, possibly substandard, status quo. In this sense, the nutrition-based measure can be viewed as a maximum level of food aid need, but not necessarily consistent with countries ability to absorb food aid.

While the status quo and nutrition-based methods differ in the estimation of requirements, they have a common structure. In each, an estimate of every country's domestic supplies of food staples is subtracted from an estimate of staple food requirements to arrive at a quantity estimate of import requirements. Import requirements are then totaled for food groups, based on assumptions regarding their substitutability. An estimate of a country's capacity to import food in each category commercially is then subtracted from the import requirement to arrive at an estimate of food aid needs. Import unit values for each food group are used to convert import requirements, import capacity, and aid needs from quantity to value terms.

Several factors affecting aid needs in a country are not addressed in these estimates. First, food distribution problems--both geographical and across income or population groups--are overlooked by the use of country food availabilities and country average food requirement measures. This can mask acute shortages in specific places within a country as well as uneven distribution of food across population groups. However, measuring the unevenness of food distribution is extremely difficult, because data are not available. Acute problems of this nature are treated qualitatively in the country narratives.

Second, food aid needs are calculated without regard to how importing the full amount of estimated aid might affect a country. In some cases, importing the full amount could disrupt the local economy; put untoward burdens on food handling, storage, and distribution channels, or discourage domestic food producers. Where pertinent, this issue is also dealt with qualitatively in the country narratives. Finally, aid needs are estimated regardless of a country's food and agriculture policies and performance. Though these issues figure importantly in allocating food aid funds, a comprehensive consideration of them is beyond the scope of this report.

INTRODUCTION  
TO COUNTRY  
NARRATIVES  
AND TABLES

The following section reports on the food and financial situation and outlook for 67 countries. The materials summarize events during the 1983/84 local marketing year (generally July-June) and on projecting food and financial conditions for 1984/85 and 1985/86.

Data shown in the tables must be interpreted with caution. Forecasts of food production, population, and financial conditions for 1984/85 and 1985/86 represent ERS's forecasts of what is likely to happen during those years. But, 1984/85 and 1985/86 estimates of all other items--stocks, use, import requirements, and aid needs--are not forecasts of what is likely to happen; they are targets derived using the status quo and nutrition assumptions summarized in the previous section, and explained in detail in the "Methodological Notes" section of the report. Aid need calculations are also subject to a number of adjustments detailed in the Methodology section.

Tables  
Entitled  
"Basic Food  
Data"

These tables provide food staple supply and utilization data for the base period (1980/81-1983/84 average and 1983/84) and for forecast years (1984/85 and 1985/86). Because the tables are long and complex, an explanation of each column heading follows:

1. Actual or forecast production--actual production for the individual staples for the 1980/81-1983/84 base period and forecast production for 1984/85 and 1985/86.
2. Actual ending stocks--actual stocks for 1980/81-1983/84. Initial calculations of status quo and nutrition-based import and aid needs are done by maintaining the ending stocks for 1983/84 constant throughout the forecasting period. Import requirements for building food security stocks are calculated subsequently for the countries for which stock data are available.
3. Net imports--actual net imports during 1980/81-1983/84. Net import figures for forecast years are not supplied. Instead, estimated import requirements based on status quo and nutrition-based approaches are provided in the next set of tables.
4. Total nonfeed use--actual human consumption during the 1980/81-1983/84 base period.
5. Feed use--actual feed use during 1980/81-1983/84 and targeted feed use for 1984/85 and 1985/86. Targeted feed use is calculated to maintain per capita feed use at base-period levels. The same level of feed use is employed in the status quo- and nutrition-based estimates of aid needs.
6. Total use--actual total feed and nonfeed consumption during 1980/81-1983/84.

7. Actual or forecast population--actual population in 1983/84 and forecast population for 1984/85 and 1985/86. Data generally include adjustments for refugee movements.
8. Per capita nonfeed use--actual per capita human consumption for 1980/81-1983/84.
9. Commodities covered and share of daily per capita caloric intake--the food staples included for each country, each staple's share of total daily caloric intake, and the share of total daily caloric intake covered by the food staples analyzed. Data are drawn from the 1975-77 FAO Food Balance Sheets with adjustments made in some cases for differences in FAO or ERS estimates of feed use or more recent significant changes in a staple's share of the diet.

Tables

Entitled

"Total Food

Requirements,

Import Require-

ments, and Aid

Needs to

Support Con-

sumption:

Status-Quo

and Nutrition-

Based

Estimates"

These tables deal only with 1984/85 and 1985/86 estimates. An explanation of each column heading follows:

1. Forecast domestic production data are drawn from the "basic food data" tables.
2. Total use, status quo--total amount of a staple needed to maintain per capita human consumption at the 1980/81-1983/84 level and feed use at the targeted level.
3. Total use, nutrition-based--the amount of a staple needed to support FAO recommended minimum daily per capita caloric intake levels and targeted feed use.
4. Import requirements, quantity, status quo--the imports of a staple required to maintain base period per capita consumption, and also to achieve the targeted levels of feed use and no change in stocks as shown in the basic food data table. These estimates are calculated for each staple by subtracting forecast domestic production from status quo-based total use.

Subtotals for each commodity group are calculated by summing the import requirements for individual commodities. Calculated surpluses (negative import requirements) for individual commodities within groups are subtracted from deficits in other commodities because foods are assumed to be substitutable within groups. Noncereals such as roots and tubers are converted to caloric wheat equivalents before being summed. Negative subtotals are shown as zeros because these calculated surpluses are assumed not to be substitutable elsewhere in the diet.

5. Import requirements, quantity, nutrition-based--the imports of a staple required to support recommended minimum per capita caloric intake, and targeted feed use, as no change in stocks is shown in the basic food data tables. These estimates are calculated by subtracting forecast domestic production from nutrition-based total use. Totals for each commodity group by year are computed as described in (4) above.



6. Import requirements, value--the estimated dollar value (c.i.f.) of the status quo and nutrition-based import requirements by commodity group. Values are calculated for each commodity group by multiplying import quantity by a country specific estimate of unit import cost.
7. Commercial import capacity--an estimate of the amount of food within each group that a country can afford to import commercially without reducing below historical levels the share of its available foreign exchange used for nonfood imports. Countries are required in forecast years to spend the same proportion of foreign exchange on commercial food imports as in the base period. The measure is sensitive to historical and projected levels of exchange holdings, total merchandise imports and exports, and debt service. The measure is provided in both quantity and value, using the same country specific estimate of unit import cost as in the import requirements estimate.
8. Food aid needs, quantity--the estimated quantity of food aid needed in each commodity group to support either the status quo- or nutrition-based use level and targeted stock and feed use levels.
9. Food aid needs, value--the estimated value of the food aid needed in each commodity group to maintain either status quo consumption or nutrition-based consumption and targeted stock and feed use levels.

Country total food aid needs in dollars can be calculated either by summing down commodity groups or by subtracting a country's total dollar commercial import capacity from the total dollar import requirements. In this way, a surplus (negative food aid needs resulting from a surplus in available foreign exchange) in one commodity group is applied toward deficits in other commodity groups. Because these countries are not expected to become food aid donors, any negative food aid need total is shown as zero.

Tables  
Entitled  
"Financial  
Indicators,  
Actual and  
Projected"

These tables give historical data and forecasts for four key financial indicators: yearend international reserves, merchandise exports, merchandise imports, and debt-service obligations. All data are on a calendar year basis and are compiled from a variety of sources, including the World Bank, the International Monetary Fund, country sources, and EKS estimates.

Tables  
Entitled  
"Summary of  
Cereal  
Import  
Requirements  
and Food  
Aid Needs"

These tables provide a summary of volume data on actual cereal imports for 1983/84 and targeted cereal import requirements and aid needs for 1984/85. The data are taken directly from the preceding tables. These summary tables provide cereal data only.

Tables  
Entitled  
"Import  
Requirements  
and Aid  
Needs to  
Support  
Cereal  
Stock  
Adjustments"

These tables provide calculations of cereal import requirements and aid needs resulting from not only consumption requirements but also from estimates of cereal stock adjustments required for food security purposes. The estimated stock increment (quantity and value) is added to import requirements and aid needs to support consumption--listed in earlier tables--to arrive at import requirements and aid needs to support both consumption and stock adjustments. For a discussion of how stock increment estimates are calculated, see "Methodological Notes."

Africa and  
the Middle  
East

NORTH  
AFRICA  
SUBREGION

North African status quo import needs are estimated at 11.9 million tons for 1984/85, up 17 percent from 1983/84 due to drought that reduced production in Morocco and Tunisia. Nutrition based import needs are estimated at 8.1 million tons, up about 20 percent from 1983/84. The 3.8-million-ton difference between status quo and nutritional based need occurs because daily caloric intake levels are above the FAO recommended minimum in all North African countries. These countries maintain generous consumer subsidies on bread and wheat products which lead to high consumption levels and some waste.

North African commercial import capacity is estimated at 10.6 million tons resulting in status quo aid needs of 3.2 million tons and no nutritional aid needs. Commercial import capacity is overestimated in this report, primarily for Morocco, where IMF financial readjustments cannot be captured by the financial model employed.

Drought in Morocco and Tunisia reduced 1982/1983 grain production to 4.1 million tons, one-third below a year earlier. The 1983/84 Moroccan harvest is also expected to be reduced by drought, while good harvests are expected in Tunisia and Egypt.

Actual North African grain imports are estimated at 11.9 million tons in 1984, equal to the status quo import estimate: 9.4 million tons of wheat and 2.5 million of coarse grains.

Egypt

Egypt is unique among food aid receipt countries. P.L. 480 assistance in 1983 totaled 1.6 million tons, about 40 percent of total concessional Egyptian grain imports. Status quo food aid needs are estimated at 3.8 million tons in 1984/85, and projected at 2.4 million in 1985/86. These contribute greatly to the estimated 1984/85 13.5 million ton food aid need for all countries. Since grain consumption in Egypt exceeds the FAO recommended minimum, the country has no nutrition-based needs.

U.S. exports of wheat and flour to Egypt increased from 2.6 million tons in 1982 to a record 3.35 million in 1983. The total included 1.4 million tons financed under Title I, P.L. 480, 200,000 tons through other P.L. 480 programs, 1.0 million tons through the PIK wheat flour sales with GSM-102 financing, and 400,000 tons financed through blended credit. This left only 350,000 tons that were not provided through U.S. Government programs in 1983.

About half the 1.6 million tons of U.S. corn exported to Egypt in 1983 was purchased with \$70 million in CIP financing and \$30 million in blended credit. Credit for corn purchases is scheduled to rise in 1984. As Egypt's trade deficit and foreign debt rise, cash purchases of U.S. farm products are declining. About 80 percent of U.S. agricultural exports valued at about \$1 billion in 1984 will involve Government financing, compared with about 50 percent in 1981.

Egyptian agricultural production increased only 1.5 percent in 1983, mostly a result of increased livestock output. A smaller cotton crop offset gains in corn and horticultural crops. Per capita food output declined in recent years as the population grew by 2.7 percent annually.

Egypt depends on imports for about half of its food supply. Efforts to stem the rising dependence caused the Import Rationalization Committee to ban imports of some food items and place barriers on others. New public land development projects received a higher priority and the area of cropland developed from the desert rose to about 90,000 acres in 1983, compared with about 15,000 acres in 1980. The increase in wheat planted on new land has allowed more small farmers, located near cities, to shift from wheat to vegetables.

Petroleum exports and remittances are scheduled to rise in 1984, but import demand and debt payments will leave little extra for cash food purchases. Egypt will continue to seek credit for food imports. Nonmilitary U.S. economic aid is expected to exceed \$1 billion. Another \$1 billion is expected from Europe, the IMF, and the World Bank.

Foreign exchange earnings for 1984 are estimated at \$10 billion, including \$4 billion for merchandise exports, \$3.5 billion from remittances, \$1.1 billion from Suez Canal tolls, and \$700 million from tourism. About one-half of Egypt's foreign debt is owed to the United States, one fourth to creditors in other developed nations, and the remainder to the World Bank and other Arab countries. Debt service payments are almost one-fifth of foreign exchange earnings. Nonmilitary foreign debt approached \$18 billion in early 1984.

#### Morocco

Morocco's grain import needs, both status quo and nutrition-based, are approximately 2.9 million tons in 1984/85. In 1983, Morocco began a series of financial adjustments under the guidance of the International Monetary Fund. These adjustments, which include devaluation, debt rescheduling, and control of foreign exchange and imports, have effected quantitative changes in critical variables in our financial model. The changes caused Moroccan food aid needs to be estimated at zero on both status quo and nutritional bases because the financial model is not formulated to include financial and policy changes as dramatic as those undertaken by Morocco. The import capacity of 4.2 million tons in 1984/85 is an overestimate of how much food Morocco can be expected to import commercially. IMF conditions and Moroccan policy are orchestrated to employ foreign exchange holdings in their most productive uses--spare parts, capital goods, and industrial inputs--and commercial food imports come at a high opportunity cost.



In 1983 all of Morocco's commercial grain imports were purchased on concessional terms. Concessional financing is the medium of competition among Morocco's suppliers and such subsidies are not captured by status quo calculations.

Moroccan grain production in 1982/83 was 3.2 million tons, 34 percent below 1981/82. Of that, wheat accounted for 1.97 million tons, barley 1.2 million, and corn 261,000. The 1982/83 season started with timely rains for plowing and seeding; however, dry weather from January to April 1983 reduced yields.

The 1983/84 crop appears to be following the same course. Rains in November helped planting, but there was virtually no rain from December through mid-March. The showers of March and possible rains during the remainder of the spring may salvage grains in the northern growing regions, but south of Casablanca and Beni Mellal the outlook is bleak. In much of this area animals are being allowed to graze on the grain crops because yield expectations are so low. Three years of dry weather also does not bode well for other crops. Rainfed areas are drought-stressed, leaving them vulnerable to erosion. Reservoirs stand at low levels, which could reduce the irrigated grain area and threaten important citrus crops as well.

Total grain use is estimated lower in 1983/84 because of the drought, financial pressure on imports, and higher consumer prices. In recent years, total food supplies have been adequate in Morocco. Caloric intake of grains has been higher than the FAO minimum. However, consumption is not evenly distributed; farm laborers and small landholders produce most of the grain they consume, but they have been hit hard by the drought. Many have migrated to urban areas--particularly Casablanca--where food is available. During 1984, Morocco is expected to import 300,000 tons of barley to supplement human as well as animal diets in the nation's southern grain regions. Actual wheat imports are estimated at 2.4 million tons for 1983/84, and 2.1 million tons in 1984/85. Corn imports are estimated at 140,000 in 1984/85 to cover the needs of the poultry industry.

#### Tunisia

Tunisia's grain import needs for 1984/85 are forecast at 1.1 million tons on a status quo basis and 665,000 tons on a nutritional basis. Tunisia appears to have the commercial capacity to purchase most of its needs. Food aid needs for 1984/85 are forecast at 201,000 tons on status quo basis; aid needs are nil on a nutritional basis.

Poor weather dominated the 1982/83 grain crop. Hard rains in the fall of 1982 disrupted planting, and dry weather in February and March retarded grain development. Total grain production was down one-third from 1981/82, 921,300 tons, versus 1.26 million. Durum wheat--the major grain--accounted for 509,500 tons, soft wheat for 109,000, and barley 303,000. However, the outlook for the 1983/84 crop is excellent; rains have been timely and plentiful and higher producer prices increased the area planted.

Imported wheat amounts to 40 percent of Tunisia's wheat consumption. The Government hoped to lower wheat imports by cutting bread subsidies in January 1984; however, the Government reversed its decision following riots throughout the nation. Official sources estimate that as much as 200,000 tons of wheat are wasted because of the cheap bread policy. This waste may account for the difference between status quo and nutritional based grain needs.

Higher food imports because of the drought raised Tunisia's balance-of-payments deficit in 1983. Current export earnings now cover only 56 percent of imports. External debt will reach an estimated \$4 million in 1984, over one-third of Gross Domestic Product. The fall in oil prices has reduced the flow of investment from the Persian Gulf, but Tunisia still has the financial capacity to commercially cover most of its food needs. Much of Tunisia's grain imports are purchased under concessional financing.





Table 12.--Summary of North Africa cereal import requirements and food aid needs to support consumption 1/

Country	1983/84		1984/85		1984/85	
	: 1983/84		: Import requirements:		: Aid needs	
	: Cereal	: Status	: Nutrit.	: Status	: Nutrit.	
	: imports	: quo	: based	: quo	: based	
	-----1,000 tons-----					
Egypt	7,622	7,994	4,507	2,797	0	
Morocco	2,410	2,862	2,957	0	0	
Tunisia	1,596	1,085	665	201	0	
North Africa, total	11,628	11,941	8,129	2,998	0	

1/ Cereal equivalent.

Table 13.--North Africa financial indicators, actual and projected

Country and year	: Inter- : national : : reserves : :(on 12/31):	: Total : : foreign : : exchange:	: Imports : : and : : other : : debits :	: Debt : : service : : due : :	1984 and 1985 conditions as of April 1984
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Table 14.--North Africa import requirements and aid needs to support cereal stock adjustments 1/

Country	Estimated stock			Import requirements			Aid needs		
	: increment			: Quantity			: Quantity		
	Quantity	Value	Status	Nutrit.	Status	Nutrit.	Quantity	Nutrit.	Status
	:	:	quo	based	:	based	:	based	quo
	:	:	:	:	:	:	:	:	:
	1,000	Million	1,000	5ons	Million dollars	1,000 tons	Million dollars	1,000 tons	Value
	tons	dollars	tons						
<u>Egypt</u>									
Cereals									
1984/85	283	56	8,277	4,790	1,650	955	3,080	0	614
1985/86	164	32	8,440	4,865	1,631	940	2,578	0	498
Total									
1984/85	--	56	--	--	1,650	955	--	0	614
1985/86	--	32	--	--	1,631	940	--	--	498
<u>Morocco</u>									
Cereals									
1984/85	161	27	3,023	3,118	501	517	0	0	0
1985/86	97	16	2,036	2,324	327	374	0	0	0
Total									
1984/85	--	27	--	--	501	517	0	0	0
1985/86	--	16	--	--	327	374	0	0	0
<u>Tunisia</u>									
Cereals									
1984/85	33	6	1,118	698	194	121	--	--	41
1985/86	26	4	1,107	681	185	114	--	--	19
Total									
1984/85	--	6	--	--	194	121	--	--	41
1985/86	--	4	--	--	185	114	--	--	19

1/ Includes only countries for which cereal stock data are available.

-- Not applicable.

WEST AFRICA  
SUBREGION

West Africa's grain-equivalent imports to meet status quo requirements are estimated at 2.7 million tons for both 1984/85 and 1985/86--a slight increase over actual imports in 1983/84. Commercial import capacity is estimated to increase from 1.2 million tons in 1984/85 to 1.4 million in 1985/86. Food aid needs are expected to drop from almost 57 percent of the total in 1984/85 to 50 percent in 1985/86. Two factors contribute to this decline: (1) some improvement in the region's financial position due to the world economic recovery and (2) greater domestic food production.

Reduced production of food crops in most West African countries in 1983/84 led to larger grain imports. Drought affected many countries, especially Senegal, Gambia, Mauritania, and Ghana. Food aid shipments increased sharply as most of the countries were unable to fill the gap with commercial imports.

Benin

Benin's grain equivalent import needs are projected at 130,000 tons for 1984/85 compared with actual grain imports of 90,000 tons in 1983/84. Long term trends in Benin indicate growth in agricultural output is lagging population growth. The status-quo calculation maintains per capita consumption at the 1980/81-1983/84 level. In recent years, food aid has made up a larger share of Benin's total imports--increasing from about 10 percent of the total in 1980/81 to over 30 percent in 1983/84. Food aid needs are projected at 75,000 tons in 1984/85. Caloric intake approaches the FAO recommended minimum, with nutrition-based needs only 8 percent higher than status-quo needs.

Benin's commercial import capacity remains low at \$11 million, or 55,000 tons of grain. This limited capacity reflects a deteriorating trade balance as imports increase more rapidly than exports. A projected steep rise in debt service in 1984 and 1985 will also reduce foreign exchange availability.

Cameroon

Cameroon's economy continues to expand, supported by growing oil exports since 1978 and sound economic policies. Real growth of GDP has averaged 7-8 percent annually during the 1980's. With a per capita income of \$881 in 1981, Cameroon has entered the ranks of the middle income countries. As a result, the country's food aid requirement has become almost insignificant. The estimate of 39,000 tons of status quo aid need in 1984/85 may be an overestimate, given Cameroon's continuing rapid growth in commercial import capacity.

Cameroon's cereal imports have accelerated in recent years, as higher incomes and urbanization spurred growth in consumer demand for wheat and rice. Wheat imports increased at an annual average rate of 26 percent during 1981-1983. Rice imports fluctuated between 30,000 and 60,000 tons during the same period. If this pace continues, actual imports are likely to exceed status quo projections of about 300,000 tons annually in 1984/85 and 1985/86.

Agricultural output in Cameroon as a whole was favorable in 1983/84, but with significant regional and product exceptions.

Northern Cameroon continued to suffer from a prolonged drought, and production of millet, sorghum, and corn declined significantly. Total cereal production declined about 7 percent to 929,000 tons. However, production of starchy tubers (cassava, yams, and sweet potatoes), which are a major component of the Cameroonian diet, increased slightly.

#### Cape Verde

Projected import requirements to meet 1984/85 and 1985/86 consumption needs in Cape Verde are similar to previous years--close to 50,000 tons. The projections are based on a modest recovery in domestic production and a declining population, as harsh drought conditions force many Cape Verdeans to emigrate. An FAO assessment recommended that the estimated 66,500 tons of food import requirements be composed of 16,500 tons of wheat, 5,000 tons of rice, 40,000 tons of corn, and 5,000 tons of beans. Food aid will be required to cover the total import requirement.

Cape Verde's chronic drought situation persisted for the 17th consecutive year in 1983, making comparisons of rainfall and production with "normal" years increasingly untenable. Because the rain started late, only one-third of the agricultural area was planted on this small, remote archipelago of nine inhabited islands. Harvests of corn and beans, the country's staple food crops, declined slightly from the previous year to 3,000 and 1,250 tons, respectively, in 1983/84.

Cape Verde has an agriculture based economy with few sources of foreign exchange earnings. The chronic trade deficit is financed by remittances and concessionary loans. Debt service, while small in absolute terms, has climbed rapidly in recent years, quadrupling from the 1980-83 average to an estimated \$6 million in 1984 thus reducing projected food import capacity to zero.

Aid accounted for about 80 percent of food imports in 1983, up from an average of 40 percent during 1975-81. Because of Cape Verde's chronic dependence on food aid, in 1982 the Government asked donors to restructure their assistance into multi-year commitments rather than emergency allocations. The United States has supplied 15,000 tons of corn annually since 1977 under P.L. 480 Title II, with an additional allocation of 2,000 tons of beans for 1984. U. S. food aid has been used to encourage Cape Verde's successful reform of corn retail prices, and local currency generation from food aid sales supports soil and water conservation projects.

#### Chad

Chad's 1984/85 import capacity is projected to remain very low--19,000 tons of grain equivalent out of total needs of 77,000 tons. Actual grain imports for 1983/84 are estimated at 75,000 tons, including 15,000 tons of wheat, 5,000 of rice, 40,000 of corn, and 15,000 of sorghum. Food aid has accounted for at least three-fourths of Chad's grain imports in recent years. About 60,000 tons of food aid has been pledged for 1983/84, including 40,000 tons of grain. Other food aid commodities are milk,

vegetable oil, and blended food products. Bringing diets up to FAO recommendations would require imports of more than 400,000 tons of grain.

During the past year, Chad's economy showed some signs of improvement: the harvest of both cotton and grains was larger than expected. Industrial activity has also begun to pick up. Factors contributing to this improvement include better weather in the south, a lull in the civil war, and increased producer prices for cotton. While grain production has not recovered to the level of the mid-1970's, the seed cotton crop of 140,000 tons is the best since 1975. The north, which is a marginal agricultural area, continued to suffer from drought and sporadic fighting.

#### Gambia

Following 2 years of good harvests, late and erratic rainfall caused Gambia's cereal production to plummet to about 50,000 tons in 1983, enough to meet less than one-half of the country's requirements. Because farmer and government food stocks are minimal, and because Gambia produces no significant quantities of drought resistant crops such as cassava, cereal imports in 1983/84 rose 17 percent to 54,000 tons. Assuming cereal production recovery in 1984/85 and 1985/86, import requirements should decline to slightly under 50,000 tons. Last year's decline in the peanut crop--which accounts for about 90 percent of foreign exchange earnings--means that Gambia must rely on food aid to meet one-third of its 1983/84 cereals deficit. Gambia's food aid dependence will continue to be about 27,000 tons in 1984/85. This reflects reduced purchasing power following a 25 percent devaluation of the dalasi, and a likely continuation in Gambia's unfavorable balance-of-payments position because of worsening terms of trade, and reductions in STABEX payments (an EC-sponsored commodity export price support program) and in development assistance. Since 1979, Gambia's debt service has increased rapidly, and is projected to reach 35 percent of exports by 1984. This is largely due to repayments scheduled to begin on IMF structural adjustment loans.

Gambia has become increasingly dependent on imports to meet its consumption requirements, with food items accounting for one-third of total imports in 1982/83. Rice and wheat imports in particular have increased due to growing consumer demand.

#### Ghana

Ghana's food shortages reached crisis proportions in 1983/84 after years of barely adequate supplies. Actual grain imports are estimated at 300,000 tons for 1983/84, up 44 percent from the average of the previous 4 years. At least half of the imports will be on concessional terms. The donors are also helping to overcome distribution problems within the country. Ghana's grain import requirements for 1984/85 are estimated at 415,000 tons. The increase is necessary to maintain consumption at historic levels. Ghana's capacity to import commercially is estimated at only 132,000 tons, leaving 283,000 tons of food aid needs in 1984/85. During the last 2 years, consumption has declined



sharply. Because consumption has been below the FAO recommended minimum for several years, nutrition-based needs are 768,000 tons.

The 1983 drought reduced food production to the point where many Ghanaians faced starvation. The year started with an unusually strong harmattan wind from the Sahara, coupled with practically no rainfall in January and February. Fires set to clear land burned uncontrolled over wide areas. This severely damaged crops such as plantains and cassava which are harvested throughout the year. Below-normal rainfall during the main growing season from April to September caused grain production to decline 12 percent, following a 23 percent drop in 1982. Root crops also declined sharply.

Declining cocoa production and exports caused Ghana's foreign exchange earnings to drop sharply from \$1.2 billion in 1980 to an estimated \$650 million in 1983. The value of exports is expected to increase in 1984 because of higher world cocoa prices. Expenditures on imports fell from \$1 billion in 1980 to about \$600 million in 1983. Grain imports fell from 296,000 tons in 1977/78 to 204,000 in 1982/83, while domestic production declined by 72,000 tons.

Some improvement is expected in 1984. Ghana has received loans from the World Bank and IMF and has devalued the cedi from 3 to 35 to the dollar. The loans will allow imports of raw materials for domestic industry and spare parts and tires for trucks to move cocoa to ports. The devaluation as well as an increase in producer prices, should encourage cocoa exports.

#### Guinea

Guinea's projected cereal import requirement for 1984/85 is 137,000 tons. Average cereal imports of 105,000 metric tons for the past 3 years indicate probable import levels. To meet the FAO minimum caloric intake, Guinea would need to import 503,000 tons. Actual commercial import capacity may be lower than the 118,000 tons estimated in this report because of unaccounted-for capital outflows.

Guinea's total cereal output in 1983/84 is estimated at 10 percent below normal. Rice production, which is centered in the coastal region, reached near average levels. In the northern region, where corn and millet are the staples, production declined 15 percent. An estimated 58 percent of the population has been affected by drought. According to the FAO, Guinea is one of 24 countries facing serious food emergencies this year.

The financial situation is clouded by political uncertainty induced by the death of President Sekou Toure in March 1984. An IMF loan agreement reached in December 1982 failed in 1983 because of the Government's refusal to devalue. The Syli has an official exchange rate one-fifth of the parallel market value. Guinea's foreign debt is estimated at \$1.5 billion, with arrears of \$200 million. Higher prices for bauxite and aluminum, which comprise 97 percent of total export value, will increase



earnings. The ARELOR diamond mine opened in 1984, and its production will provide a major boost to the country's export earnings.

Agricultural exports continue to decline. However, stated production does not capture quantities illegally exported to neighboring countries for hard currency.

Guinea-Bissau Import needs to maintain status quo consumption are estimated at 43,000 tons in 1984/85. Below normal precipitation during the 1983 (June-October) rainy season adversely affected production. The FAO mission which visited Guinea-Bissau in December estimated 1983 cereal production at 12 percent below the previous year's normal output. Cassava production suffered because of reduced rainfall and a growing mealy bug infestation. Enough food exists in the countryside to feed the rural population, but without emergency food assistance, shortages will occur in urban centers.

Import capacity is projected at only 3,000 tons, resulting in food aid needs of 40,000 metric tons. In the past, food aid has accounted for all but a small quantity of grain imports. With foreign exchange almost nonexistent, this trend will continue. Arrears on debt limit the country's ability to borrow money to finance the trade deficit. A 50-percent devaluation of the peso in December 1983 and adoption of an economic and financial stabilization program should improve the balance-of-payments situation.

Liberia Good weather and an expansion in area following a 50-percent increase in producer prices boosted Liberia's rice harvest to 168,000 tons in 1983, surpassing the good 1982 crop. Rice is the main staple food and is produced by about 90 percent of farm households. Domestic rice production accounts for two-thirds of per capita cereal consumption of about 140 kilograms annually. If good rice harvests continue in 1984/85 and 1985/86, output should keep pace with the 3.4-percent population growth rate, and keep rice import requirements at about 100,000 tons annually. Production of cassava--the other major staple--increased slightly to 200,000 tons in 1983. Total cereal import requirements in 1984/85 and 1985/86 (85 percent rice and 15 percent wheat) are projected at 121,000 tons, and 116,000 tons, respectively. About 45 percent of 1984/85 cereal import requirements will have to be covered by food aid.

Liberia's difficult financial situation has improved slightly due to some recovery in world prices for iron ore and rubber. However, mounting debt obligations--particularly on IMF standby agreements provided in the past 3 years--are likely to offset improvements in the trade balance. This will cause continued food aid dependence.

Mali Mali's grain imports in 1983/84 are estimated at 185,000 tons including 70,000 of wheat, 60,000 of rice, 35,000 of corn, and 20,000 of sorghum. Food aid has supplied 40-50 percent of grain

imports during recent years. Grain equivalent import needs are expected to decrease to 171,000 tons in 1984/85, assuming improved growing conditions.

During the 1983 growing season rainfall varied widely from region to region. In the better-watered south, precipitation was close to normal while the northern half of the country received only 25-40 percent of normal rainfall. Farmers in the north suffered both crop and livestock losses. The Niger River crested well below normal, reducing the area available for flood recession crops.

Mali's import capacity is estimated at only 46,000 tons, leaving grain equivalent food aid needs of 125,000 tons in 1984/85. Despite a projected increase in exports, the country's import capacity remains low because of rapidly growing imports and other foreign exchange costs. Debt service is also forecast to increase sharply in 1984 and 1985. However, these payments are likely to be rescheduled, thereby increasing Mali's actual import capacity.

Mali's nutrition-based import needs of almost 600,000 tons in grain equivalent are unusually high. The estimate could reflect either a sharp decline in consumption since the 1975-77 base period, or an FAO production base much higher than the FANA series.

The Government of Mali has been working with a multidonor group to reform the pricing and management of the cereal marketing board. As a result, producer prices for grains have been increased. The sale of grain provided by the donor countries has been tied to reductions in consumer subsidies and the expansion of production incentives.

#### Mauritania

Cereal production in 1983/84 will meet only 7 percent of consumption requirements, leaving a status quo import requirement of about 183,000 tons, of which 60 percent must be food aid. An estimated 80-90 percent of the population is in need of relief.

Serious drought in Mauritania has devastated crop and livestock production. Average rainfall during the planting season was only 27 percent of normal, causing a significant reduction in area planted and poor pasture conditions. Cereal production in 1983 dropped to 14,000 tons, from 44,000 in 1982, continuing a generally declining trend in cereal output, as years of sustained meagre rainfall contribute to low yields and desertification. Livestock losses in 1983/84 are estimated at up to 70 percent in the driest areas. Surviving herds have migrated south to Mali and Senegal in search of pasture, reducing the available food supply in Mauritania.

Prolonged drought in Mauritania has had a destructive long-term impact on the country's economic and social system. Loss of pasture has gradually ruined the pastoral economy based on

nomadic herding. In 1960, 80 percent of the population was involved in herding; in 1980, only 25 percent remained herders.

The massive rural exodus and setting of nomads has pushed the annual urban growth rate to an estimated 15 percent. In turn, urbanization and loss of meat and milk production have reduced per capita consumption of animal products and increased per capita cereals requirements to an estimated 111 kg. in 1983/84 compared to an annual average intake of 104 kg. during 1975-77. Wheat in particular has become an increasingly important component of the diet, largely due to the composition of food aid. Declining domestic cereal production, in the face of rapidly expanding consumption, has raised dependence on food imports to about 200,000 tons annually in 1982-84, compared with about 90,000 tons annually during 1970-72, and 126,000 at the height of the Sahel drought in 1974.

One implication of these structural changes is that the projections in this report, which are based on historical import and dietary trends, are likely to underestimate future cereal import requirements. The rapid increase in cereal intake in recent years is likely to increase status quo and nutrition based needs by 30-50 percent over projected requirements for 1984/85 and 1985/86. A gap remains between status quo and nutrition-based intake.

Food import requirements have placed a heavy burden on the scarce resources of Mauritania, as world demand for iron ore--its principle export--has fallen in recent years. Large trade deficits have been financed by foreign assistance. Servicing of a foreign debt that represented a staggering 163% of GDP in 1982 has created substantial pressure on available foreign exchange. Stringent austerity measures have been implemented, including a 43-percent increase in the retail price of rice. Prospects for debt rescheduling or additional financial assistance are poor following a breakdown of negotiations with the IMF in late 1983.

## Niger

Niger's actual 1983/84 grain imports are estimated at 105,000 tons--40,000 of wheat, 15,000 of rice and 50,000 of coarse grains (sorghum or corn). The 1984/85 status-quo import needs are projected at 164,000 tons, grain-equivalent, significantly above the 1980/81-1983/84 average of 112,000 tons. The status quo calculation maintains consumption at historical levels, which in Niger's case have been very high--315 kg of grain per capita per year. Grain availability exceeds the FAO recommended minimum, placing nutrition-based import needs at zero. This indicates official the statistics for Niger used in this report may overestimate production.

During 1983, sorghum and millet production was near normal because of adequate rainfall in the major producing areas, which supply 95 percent of grain consumption. Marginal agricultural areas in the north and east were hit by drought, causing grain deficits and poor pasture conditions. To alleviate these shortages, the Government is supplying 30,000 tons of millet and



sorghum from its stocks. External assistance has been requested to replenish security stocks to the required level of 65,000 tons.

Niger's import capacity for 1984/85 is estimated at \$18 million or 53,000 tons in grain equivalent, leaving aid needs of 113,000 tons. The country's financial position has deteriorated in recent years as demand for uranium has slackened. During 1980-83, exports stagnated in local currency terms, and declined sharply in U.S. dollars. Imports increased in 1983 and are likely to continue this growth in 1984 and 1985.

#### Senegal

Grain equivalent import needs for 1984/85 are projected at 574,000 tons to maintain historic consumption levels. Senegal's import capacity is estimated at only 242,000 tons reflecting reduced export earnings from peanuts. Food aid needs are estimated at 232,000 tons of grain. To bring caloric intake up to the FAO recommended minimum, 568,000 tons of imported grain would be required in 1984/85.

Rainfall during the 1983 growing season ranged from about 50 percent of normal in southern Senegal to less than 30 percent in the north. Grain production of 509,000 tons was down 40 percent from 1982. The peanut harvest dropped from 955,000 tons to 550,000 tons in 1983. Peanut products account for about 25 percent of Senegal's export earnings.

Grain consumption is expected to decline in 1983/84 because the country will be unable to import sufficient quantities to make up the deficit. Normal imports range from 450,000 to 650,000 tons, including 325,000 tons of rice and 100,000 tons of wheat. Imports in the current year will rise well above 500,000 tons, but the 200,000 ton shortfall in millet and sorghum production is not likely to be filled.

As of March 1984, more than 170,000 tons of grain for food aid had been pledged by various donors, including 72,000 tons from the United States. This, along with normal commercial purchases, should prevent serious food shortages during the next few months. In most years, about 20 percent of Senegal's grain imports are financed on concessional terms.

#### Sierra Leone

Assuming a continuation of good harvests, total cereal import requirements for Sierra Leone in 1984/85 and 1985/86 are projected at 100,000 tons and 105,000 tons, respectively. Following past trends, rice should continue to comprise 62 percent of cereal imports, with wheat making up most of the remainder. Sierra Leone will depend on aid to cover almost two-thirds of its projected import requirements in 1984/85.

Favorable weather in 1983 resulted in the second consecutive year of good harvests in Sierra Leone. Rice production increased about 3 percent to 365,000 tons and cassava output remained at the previous year's level of 340,000 tons. Rice is the staple food, with annual per capita consumption of 115 kg. Increased rice demand, due to population growth and urbanization, has

outstripped growth in domestic production, a problem compounded by smuggling of domestic rice into the more lucrative markets of neighboring countries. As a result, rice imports have increased steadily in recent years and now account for about 15 percent of total consumption. In 1982, the growing cost of rice imports reached one-third the value of total export earnings.

Sierra Leone's ability to finance cereal imports is constrained by serious economic problems. GDP decreased in real terms in 1982/83, continuing several years of stagnation. Major contributing factors are the fall in major mineral exports in recent years (iron ore and diamonds), overvaluation of the leone, and high domestic demand that caused inflation. Balance-of-payments pressure has created acute foreign exchange shortages, further hampering economic activity. Sierra Leone has taken several steps toward an economic recovery--partly in conjunction with an IMF standby agreement--including a 50-percent devaluation, an austerity budget, and increased producer prices intended to stimulate production and reduce smuggling.

#### Togo

Normally self-sufficient in food production, Togo has appealed for the first time for international emergency assistance. Import needs are estimated at 107,000 tons in 1984/85, although 190,000 tons of imports would be necessary to meet FAO minimum caloric intake levels. The country's heavy reliance on starchy roots and tubers such as yams and cassava which have fewer calories by weight than cereals, causes this large difference.

Togo suffered its second year of below-normal harvests in 1983 with cereal production 9 percent below the poor 1982 harvest. Yams and cassava also declined by 7 percent. The harmattan (dry wind that blows south from the Sahara) was severe and continued into March when rains should have begun in the south. Overall rainfall was 30 percent below normal.

Aid needs are estimated at 82,000 tons. Togo's serious debt problem limits its ability to purchase necessary imports commercially. An external debt of \$1 billion is extremely high for Togo's small economy. Phosphate mining, which provides 40 percent of hard currency earnings, operates at well below capacity. Coffee and cocoa production declined 45 percent in 1983 due to adverse weather conditions, resulting in lower earnings for the two most important agricultural exports. On the positive side, Togo negotiated an agreement with the IMF for a \$23 million standby arrangement and a \$40 billion World Bank structural adjustment loan that should improve its financial picture.

#### Upper Volta

Following 2 years of good harvests, below-normal rainfall in Upper Volta in 1983/84 caused cereal production to decline 30 percent from a year earlier to about 1 million tons. Late and erratic rainfall in the north and northwest--typically cereal deficit regions--caused a sharp decline in yields. The early end of the rainy season further decreased production, even in the normally surplus southwest. Production will fall short of



1980/81-1983/84 average annual consumption by 250,000 tons. Farmer and government stocks are estimated at 117,000 tons.

As 94,000 tons of food aid has been pledged, the remaining 1983/84 cereals gap must be met by commercial imports, which were 10,000 tons in 1982/83, or by reduced consumption. A projected recovery in cereals production in 1984 and 1985 is expected to reduce import requirements to about the 1981 and 1982 level of 90,000 to 100,000 tons. Status quo imports represent about half the level that would be required to bring per capita intake up to the FAO minimum levels.

Development efforts have yet to significantly increase the productivity in agriculture, which employs 90 percent of the population. There has been some success in expanding output of the principle export crops--cotton, shea nuts, and fruits and vegetables. However, a decline in both value and volume of exports in 1982 and 1983 has contributed to a steady worsening of Upper Volta's chronic trade deficit. In 1983, exports are estimated at only 31 percent of imports. Debt service in 1984 is projected to climb to 25 percent of export earnings. Because of its financial situation, Upper Volta has depended on outside aid for 60-85 percent of its food imports in recent years. Food aid will be needed to cover about 80 percent of food import requirements in 1984 and 1985.

Table 15.--West Africa basic food data

Country/commodity	:Actual or:		:Use				:Actual:		:Per:		Commodities covered and share of daily per capita caloric intake
	:Actual or:	:targeted:	:Net:	:Nonfeed:	:Feed:	:Total:	:targeted:	:Actual or:	:capita:		
	:forecast:	:beginning:	:imports:	:use:	:use:	:use:	:ending:	:forecast:	:nonfeed:		
	:production:	:stocks:					:stocks:	:population:	:use:		
	-----1,000 tons-----						Thousands	Kilos	Commodity	Percent	
<u>Benin</u>											
Wheat 2.19											
Rice 2.77											
Major cereals											
1980/81-1983/84:	348	0	88	436	0	436	0	3,745	117	Corn 22.61	
1983/84 prel.:	344	0	90	434	0	434	0	3,927	111	Sorghum 6.10	
1984/85 est.:	358	0	--	--	0	--	0	4,037	--	Millet .97	
1985/86 est.:	377	0	--	--	0	--	0	4,150	--	Cassava 22.70	
Yams 13.39											
Total 70.72											
Roots and tubers:											
1980/81-1983/84:	1,264	0	0	1,264	0	1,264	0	--	338		
1983/84 prel.:	1,250	0	0	1,250	0	1,250	0	--	319		
1984/85 est.:	1,320	0	--	--	0	--	0	--	--		
1985/86 est.:	1,360	0	--	--	0	--	0	--	--		
<u>Cameroon</u>											
Wheat 3.36											
Rice 2.61											
Major cereals											
1980/81-1983/84:	942	0	261	1,203	0	1,203	0	9,223	130	Corn 14.38	
1983/84 prel.:	929	0	360	1,289	0	1,289	0	9,950	134	Millet 13.20	
1984/85 est.:	1,007	0	--	--	0	--	0	9,820	--	Cassava 9.48	
1985/86 est.:	1,045	0	--	--	0	--	0	10,056	--	Yams & sweet potatoes 4.82	
Plantains 7.74											
Peanuts 9.92											
Total 65.51											
Roots and tubers:											
1980/81-1983/84:	2,077	0	0	2,077	0	2,077	0	--	225		
1983/84 prel.:	2,090	0	0	2,090	0	2,090	0	--	218		
1984/85 est.:	2,140	0	--	--	0	--	0	--	--		
1985/86 est.:	2,165	0	--	--	0	--	0	--	--		
Peanuts											
1980/81-1983/84:	173	0	0	173	0	173	0	--	19		
1983/84 prel.:	170	0	0	170	0	170	0	--	18		
1984/85 est.:	185	0	--	--	0	--	0	--	--		
1985/86 est.:	185	0	--	--	0	--	0	--	--		
<u>Cape Verde</u>											
Wheat 4.65											
Rice 3.85											
Major cereals											
1980/81-1983/84:	4	0	50	54	0	54	0	343	158	Corn 43.22	
1983/84 prel.:	3	0	52	55	0	55	0	345	159	Pulses 6.17	
1984/85 est.:	5	0	--	--	0	--	0	342	--	Total 57.90	
1985/86 est.:	6	0	--	--	0	--	0	340	--		
Pulses											
1980/81-1983/84:	1	0	0	1	0	1	0	--	3		
1983/84 prel.:	1	0	0	1	0	1	0	--	3		
1984/85 est.:	1	0	--	--	0	--	0	--	--		
1985/86 est.:	1	0	--	--	0	--	0	--	--		

--Continued

Table 15.--West Africa basic food data--continued

Country/commodity	:Actual or:		:Use:		:Actual:		:Per:		Commodities covered and share of daily per capita caloric intake	
	:Actual or:	:targeted:	:Net:	:	:	: or:	:Actual or:	: capita:		
	:forecast:	:beginning:	:imports:	:Nonfeed:	:Feed:	: Total:	:targeted:	:forecast:		: nonfeed:
	:production:	: stocks:	: use:	: use:	: use:	: ending:	:population:	: use:		
	:	:	:	:	:	:	: stocks:	:	:	
	-----1,000 tons-----						Thousands	Kilos	Commodity	Percent
<u>Chad</u>										
Major cereals									Wheat	1.75
1980/81-1983/84:	524	0	64	588	0	588	0	4,789	Rice	3.34
1983/84 prel.:	546	0	75	621	0	621	0	4,994	Corn	1.53
1984/85 est.:	556	0	--	--	0	--	0	5,138	Millet	50.03
1985/86 est.:	573	0	--	--	0	--	0	5,287	Cassava	6.08
									Total	62.74
Roots and tubers										
1980/81-1983/84:	177	0	0	177	0	177	0	--	37	
1983/84 prel.:	179	0	0	179	0	179	0	--	36	
1984/85 est.:	185	0	--	--	0	--	0	--	--	
1985/86 est.:	190	0	--	--	0	--	0	--	--	
<u>Gambia</u>										
Major cereals									Rice	37.48
1980/81-1983/84:	77	0	50	127	0	127	0	628	Millet	12.90
1983/84 prel.:	48	0	54	102	0	102	0	654	Wheat	5.67
1984/85 est.:	87	0	--	--	0	--	0	672	Corn	6.22
1985/86 est.:	94	0	--	--	0	--	0	690	Peanuts	6.47
									Sorghum	5.76
									Total	80.97
Peanuts										
1980/81-1983/84:	136	0	-149	28	0	28	0	--	44	
1983/84 prel.:	105	0	-89	16	0	16	0	--	25	
1984/85 est.:	171	0	--	--	0	--	0	--	--	
1985/86 est.:	188	0	--	--	0	--	0	--	--	
<u>Ghana</u>										
Major cereals									Wheat	4.37
1980/81-1983/84:	585	0	236	751	70	821	0	12,545	Rice	2.63
1983/84 prel.:	466	0	300	696	70	766	0	13,186	Corn	11.77
1984/85 est.:	568	0	--	--	76	--	0	13,542	Sorghum	3.97
1985/86 est.:	596	0	--	--	78	--	0	13,984	Millet	3.13
									Cassava	20.22
									Cocoyams	11.43
									Plantains	11.28
									Total	68.80
Roots and tubers										
1980/81-1983/84:	5,302	0	0	5,302	0	5,302	0	--	423	
1983/84 prel.:	5,150	0	0	5,150	0	5,150	0	--	391	
1984/85 est.:	5,475	0	--	--	0	--	0	--	--	
1985/86 est.:	5,650	0	--	--	0	--	0	--	--	
<u>Guinea</u>										
Major cereals									Rice	30.09
1980/81-1983/84:	414	41	111	529	0	529	38	5,813	Cassava	11.75
1983/84 prel.:	414	35	110	529	0	529	30	6,055	Wheat	3.05
1984/85 est.:	435	30	--	--	0	--	30	6,218	Corn	17.57
1985/86 est.:	448	30	--	--	0	--	30	6,385	Total	62.46
Roots and tubers										
1980/81-1983/84:	499	0	0	499	0	499	0	--	86	
1983/84 prel.:	505	0	0	505	0	505	0	--	83	
1984/85 est.:	519	0	--	--	0	--	0	--	--	
1985/86 est.:	533	0	--	--	0	--	0	--	--	

Continued

Table 15.--West Africa basic food data--continued

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Continued

Table 15.--West Africa basic food data--continued

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Table 16.--West Africa food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates

Country/ commodity	: Total use 1/ :				: Import requirements :				: Food aid needs :			
	Forecast :	Status :Nutrit.:	Quantity :	Value :	Forecast :	Status :Nutrit.:	Quantity :	Value :	Commercial :	Quantity :	Value :	
	production: quo :	Status :Nutrit.:	Status :Nutrit.:	Status :Nutrit.:	production: quo :	Status :Nutrit.:	Status :Nutrit.:	Status :Nutrit.:	import :	Status :Nutrit.:	Status :Nutrit.:	
	:	quo :	quo :	quo :	:	quo :	quo :	quo :	capacity :	quo :	quo :	
	:	:	:	:	:	:	:	:	:	:	:	
	-----1,000 tons-----				Million dollars				1,000 tons	Million dollars		
<b>Benin</b>												
Major cereals												
1984/85	358	471	460	113	102	--	--	--	--	--	--	--
1985/86	377	484	474	107	97	--	--	--	--	--	--	--
Roots and tubers												
1984/85	1,320	1,364	1,416	44	96	--	--	--	--	--	--	--
1985/86	1,360	1,403	1,458	43	98	--	--	--	--	--	--	--
Total above 2/												
1984/85	--	--	--	130	141	27	29	11	55	75	15	18
1985/86	--	--	--	123	137	25	27	12	60	64	13	15
<b>Cameroon</b>												
Major cereals												
1984/85	1,007	1,280	1,144	273	137	--	--	--	--	--	--	--
1985/86	1,045	1,311	1,173	266	128	--	--	--	--	--	--	--
Roots and tubers												
1984/85	2,140	2,213	2,512	73	372	--	--	--	--	--	--	--
1985/86	2,165	2,266	2,565	101	400	--	--	--	--	--	--	--
Peanuts												
1984/85	185	184	271	-1	86	--	--	--	--	--	--	--
1985/86	185	188	276	3	91	--	--	--	--	--	--	--
Total above 2/												
1984/85	--	--	49	298	398	63	84	55	259	39	8	29
1985/86	--	--	49	307	407	63	83	59	290	17	4	24
<b>Cape Verde</b>												
Major cereals												
1984/85	5	54	--	49	44	9	8	0	0	49	9	8
1985/86	6	54	--	48	43	8	7	0	0	48	8	7
Pulses												
1984/85	1	1	5	0	4	0	2	0	0	0	0	2
1985/86	1	1	5	0	4	0	2	0	0	0	0	2
Total												
1984/85	--	--	--	--	--	9	10	--	--	--	9	10
1985/86	--	--	--	--	--	8	9	--	--	--	0	9

--Continued

Table 16.--West Africa food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates--continued

Country/ commodity	: Total use 1/		: Import requirements				Commercial import capacity	: Food aid needs					
	: Forecast		: Status		: Nutrit.			: Quantity		: Value			
	: domestic	: Status	: Nutrit.	: Quantity	: Value	: Status		: Nutrit.	: Status	: Nutrit.			
	: production	: quo	: based	: Status	: Nutrit.	: Status		: Nutrit.	: Status	: Nutrit.			
	: quo	: based	: quo	: based	: quo	: based	: quo	: based	: quo	: based	: quo	: based	
								1,000 tons	Million dollars			1,000 tons	Million dollars
<u>Chad</u>													
Major cereals													
1984/85	556	630	931	74	375	--	--	--	--	--	--	--	--
1985/86	573	649	958	76	385	--	--	--	--	--	--	--	--
Roots and tubers													
1984/85	185	190	266	5	81	--	--	--	--	--	--	--	--
1985/86	190	196	273	6	83	--	--	--	--	--	--	--	--
Total above 2/													
1984/85	--	--	--	77	407	28	151	19	7	57	388	21	144
1985/86	--	--	--	78	418	27	150	23	8	52	395	19	142
<u>Gambia</u>													
Major cereals													
1984/85	87	136	123	49	36	--	--	--	--	--	--	--	--
1985/86	94	140	128	46	34	--	--	--	--	--	--	--	--
Peanuts													
1984/85	171	30	95	3/	3/	--	--	--	--	--	--	--	--
1985/86	188	30	103	3/	3/	--	--	--	--	--	--	--	--
Total above 2/													
1984/85	--	--	--	49	36	8	6	22	4	27	15	4	2
1985/86	--	--	--	46	34	7	5	28	5	17	5	3	1
<u>Ghana</u>													
Major cereals													
1984/85	568	890	1,099	322	531	--	--	--	--	--	--	--	--
1985/86	596	919	1,136	322	540	--	--	--	--	--	--	--	--
Roots and tubers													
1984/85	5,475	5,733	6,102	258	627	--	--	--	--	--	--	--	--
1985/86	5,650	5,920	6,301	270	651	--	--	--	--	--	--	--	--
Total above 2/													
1984/85	--	--	--	415	768	102	189	132	33	283	636	69	156
1985/86	--	--	--	421	787	100	187	148	35	273	638	65	152
<u>Guinea</u>													
Major cereals													
1984/85	435	566	881	131	446	--	--	--	--	--	--	--	--
1985/86	448	581	905	133	457	--	--	--	--	--	--	--	--
Roots and tubers													
1984/85	519	534	662	15	143	--	--	--	--	--	--	--	--
1985/86	533	548	680	15	147	--	--	--	--	--	--	--	--
Total above 2/													
1984/85	--	--	--	137	503	43	158	122	38	15	381	5	120
1985/86	--	--	--	139	516	42	157	121	37	19	395	6	120

--Continued

Table 16.--West Africa food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates--continued

Continued

Table 16.--West Africa food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates--continued

[illegible]

1/ The sum of targeted nonfeed and feed use.

2/ Cereal equivalent.

3/ Surplus pulse capacity partially offsets cereal aid needs.

-- Not applicable.



Table 17.--Summary of West Africa import requirements  
and food aid needs to support consumption 1/

Country	:	:	1984/85		:	1984/85	
	:	:	1983/84 : Import requirements:		:	Aid needs	
	:	:	Cereal	Status	Nutrit.	Status	Nutrit.
	:	:	imports	quo	based	quo	based
	:	:	----- <u>1,000 tons</u> -----				
Benin	:	:	90	130	141	75	86
Cameroon	:	:	360	298	398	39	139
Cape Verde	:	:	52	49	44	49	44
Chad	:	:	75	77	407	57	388
Gambia	:	:	54	49	36	27	15
Ghana	:	:	300	415	768	283	636
Guinea	:	:	110	137	503	15	381
Guinea-Bissau	:	:	46	43	82	40	79
Liberia	:	:	115	121	110	54	43
Mali	:	:	185	171	599	125	552
Mauritania	:	:	198	185	213	130	158
Niger	:	:	105	164	0	113	0
Senegal	:	:	465	574	568	332	326
Sierra Leone	:	:	101	100	53	63	16
Togo	:	:	90	107	189	82	164
Upper Volta	:	:	94	98	203	78	182
West Africa, total	:	:	2,440	2,716	4,305	1,560	3,209

1/ Cereal equivalent.

Table 18.--West Africa financial indicators, actual and projected

Country and year	Inter- national reserves (on 12/31):	Exports (fob)	Imports (fob)	Debt service due	1984 and 1985 conditions as of April 1984
Million dollars					
<u>Benin</u>					
1980-83	18.85	302.2	568.5	33.6	The drought in 1983 reduced production of all of Benin's export crops including oil palm products, cotton, and coffee. Some recovery is expected in 1984 as the rainy season has started well. World prices for primary
1983 prel.	4.7	275	650	59.5	
1984 est.	5.0	290	759	86.6	
1985 est.	5.5	300	850	85.6	
<u>Cameroon</u>					
1980-83	100.9	1633.5	1457.05	234.9	Increased oil exports created a balance of trade surplus, that more than offset a decline in revenues in recent years in traditional agricultural exports--coffee, cocoa, and timber. External borrowing and debt service have increased moderately to help finance development.
1983 prel.	62.6	1750	1641.2	292.4	
1984 est.	67.7	2000	1887.4	284.5	
1985 est.	73.4	2150	2000	292.5	
<u>Cape Verde</u>					
1980-83	26.25	4.7	66.7	1.5	products are more favorable. Limited resource base accounts for the size and growth of the chronic trade deficit. The trade deficit is financed by worker remittances and concessionary loans. Debt service is ballooning due to major infrastructural investments undertaken since 1979.
1983 prel.	26	4	68	4	
1984 est.	25	4.4	60	6	
1985 est.	23	3.5	60	6	
<u>Chad</u>					
1980-83	8.8	67.1	145.5	4.2	Chad's exports are expected to recover somewhat in 1984 because of a larger cotton crop and reduced fighting in the south. Growth in imports will be slow. The debt service ratio is about 17 percent.
1983 prel.	11.2	56.4	140	11.1	
1984 est.	12.1	61.5	145	10.8	
1985 est.	13.1	71	159.5	11.5	
<u>Gambia</u>					
1980-83	3.9	40.8	125.9	5.7	The poor 1983 harvest of peanuts, the primary source of foreign exchange, will significantly reduce export earnings and exacerbate balance of payments problems that forced a 25 percent devaluation of the dalasi in February 1984. A sharp increase in debt servicing--largely due to repayment of recent IMF structural adjustment loans--further reduces Gambia's import capacity. Foreign exchange reserves are virtually depleted.
1983 prel.	3	35.4	116.5	10.7	
1984 est.	3	33.5	115	11.7	
1985 est.	3.3	40	120	12.8	
<u>Ghana</u>					
1980-83	119.3	813.1	735.5	73.4	Ghana's financial position has deteriorated since 1980 because of a sharp drop in cocoa exports. Loans from the World Bank and IMF and higher world cocoa prices should improve foreign exchange availability in 1984 and 1985.
1983 prel.	100	650	600	80.5	
1984 est.	125	700	675	84.9	
1985 est.	150	750	750	94.2	
<u>Guinea</u>					
1980-83	89.5	330.5	323.5	95.2	Surplus on trade balance more than offset by capital outflows leaving current account deficit. Inflows to finance OAU (spell out!!!!!!)Conference helped overall position in 1983 and 1984. However, General Import Program remains severely restricted which limits development possibilities--with the exception of mining imports which increased 20 percent.
1983 prel.	115	370	355	124	
1984 est.	95	380	370	120	
1985 est.	90	385	370	131	
<u>Guinea-Bissau</u>					
1980-83	14.6	11.7	57	4.8	Negative trade balance should continue over short term, severely limiting the country's liquidity. Foreign assistance will be necessary to finance imports as arrears on debt prohibit further commercial borrowing.
1983 prel.	16.2	9	53	11.7	
1984 est.	14.9	11	47	12	
1985 est.	13.7	11	45	9.3	

--Continued

Table 18.--West Africa financial indicators, actual and projected--continued

Country and year	Inter- national reserves (on 12/31):	Exports (fob)	Imports (fob)	Debt service due	1984 and 1985 conditions as of April 1984
Million dollars					
<u>Liberia</u>					
1980-83	5.6	504.1	475.0	40.3	World prices for iron ore and rubber, Liberia's major source of foreign exchange, show some recovery. However, mounting debt obligations, particularly on the IMF standby agreements, will exert continued pressure on foreign exchange availability and limit food import capacity.
1983 prel.	5.6	437.6	575.3	62.3	
1984 est.	6.1	477.1	661.7	90.2	
1985 est.	6.6	551.0	762.5	96.3	
<u>Mali 1/</u>					
1980-83	16.05	213.9	476.1	33.1	Cotton exports provide about 40 percent of Mali's foreign exchange earnings. Good crops in 1982 and 1983 bolstered exports. Better food production in 1984 would allow Mali to cut back on imports.
1983 prel.	15.6	203.9	416.6	39.6	
1984 est.	16.8	225	500	65.5	
1985 est.	18.2	239.3	575	76.2	
<u>Mauritania</u>					
1980-83	142.7	228	397.7	61.8	Prolonged drought and low world demand for iron ore contribute to further deterioration of the almost unsupportable balance of payments problems. Prospects for debt rescheduling are poor. Stringent austerity measures are being undertaken. Substantial food aid dependence will continue.
1983 prel.	130	210	460	123	
1984 est.	140.6	230	495	88.5	
1985 est.	152.3	245	530	120.5	
<u>Niger</u>					
1980-83	72.3	441.9	673.2	75.4	Uranium exports have stagnated as world demand slackened. The market is not likely to improve in the short run. Imports continue to increase rapidly.
1983 prel.	28.0	354.7	600	89.5	
1984 est.	30.3	381.7	650	101	
1985 est.	32.8	440.8	700	98.6	
<u>Senegal</u>					
1980-83	12.4	480.2	925.7	144.9	The 1983 drought will sharply reduce Senegal's export earnings from peanuts in 1984, and at the same time increase the need for imported food. Senegal recently rescheduled \$175 million of its \$1.4 billion in foreign debt and negotiated a \$66.5-million standby credit with the IMF.
1983 prel.	15.9	510	950	208.7	
1984 est.	17.2	425	1050	211.5	
1985 est.	18.6	500	1150	219.4	
<u>Sierra Leone</u>					
1980-83	15.8	146.5	324	41.6	The fall in volume and value of iron ore and diamond exports, overvaluation of the Leone, and constrained economic activity due to lack of foreign exchange contribute to limited food import capacity. Austerity measures that include a 50-percent devaluation have been implemented.
1983 prel.	7.9	108	363	32.4	
1984 est.	8.5	118	418	32.8	
1985 est.	9.2	136	481	32.1	
<u>Togo</u>					
1980-83	138.5	243.8	366.3	64.0	Rescheduling of debt and loans from the IMF and World Bank will improve balance of payments for 1984. With normal weather, coffee and cocoa exports should return to historical levels and increase export earnings.
1983 prel.	157.0	196.4	397.2	121.7	
1984 est.	169.81	214.1	456.8	108.1	
1984 est.	183.96	247.3	526.4	88.2	
<u>Upper Volta</u>					
1980-83	64.5	122.8	306.3	17.1	Imports declined 50 percent during 1983, reflecting uncertainty in the Upper Volcan economy. A fall in export earnings from cotton and livestock caused the chronic trade deficit to continue. External debt has grown rapidly and a weak economy has necessitated debt rescheduling and negotiation of standby credit.
1983 prel.	57	98.0	300	18.6	
1984 est.	62.6	127.2	340	31.8	
1984 est.	67.8	146.9	390	40.2	

1/ Export and import columns include other Mali foreign exchange earnings and debits.

Table 19.--West Africa import requirements and aid needs to support cereal stock adjustments 1/

Country	Import requirements				Aid needs			
	Estimated stock increment		Quantity		Value		Quantity	
	Quantity	Value	Status	Nutrit.	Status	Nutrit.	Status	Nutrit.
	quo	based	quo	based	quo	based	quo	based
	1,000 tons	Million dollars	1,000 tons	Million dollars	1,000 tons	Million dollars		
<u>Guinea</u>								
Cereals								
1984/85	10	3	147	513	46	161	25	391
1985/86	6	2	145	522	44	159	25	401
Total								
1984/85	--	3	--	--	46	161	--	8
1985/86	--	2	--	--	44	159	--	8
<u>Guinea-Bissau</u>								
Cereals								
1984/85	3	1	46	85	15	27	43	82
1985/86	2	1	45	84	14	27	38	78
Total								
1984/85	--	1	--	--	15	27	--	14
1985/86	--	1	--	--	14	27	--	12
<u>Liberia</u>								
Cereals								
1984/85	3	1	124	113	45	41	58	46
1985/86	2	1	118	108	42	38	37	27
Total								
1984/85	--	--	--	--	--	--	--	--
1985/86	--	--	--	--	--	--	--	--
<u>Mauritania</u>								
Cereals								
1984/85	1	2/	184	214	33	39	131	159
1985/86	1	2/	186	216	33	38	120	161
Total								
1984/85	--	--	--	--	33	39	--	26
1985/86	--	--	--	--	33	38	--	27
<u>Niger</u>								
Cereals								
1984/85	21	7	185	11	62	10	134	21
1985/86	14	4	189	0	61	6	124	14
<u>Senegal</u>								
Cereals								
1984/85	17	3	591	585	123	122	309	349
1985/86	11	2	591	587	120	119	223	264
Total								
1984/85	--	3	--	--	115	122	--	64
1985/86	--	2	--	--	111	119	--	45

1/ Includes only countries for which cereal stock data are available.

2/ Less than \$500,000.

-- Not applicable.



CENTRAL  
AFRICA  
SUBREGION

Much of Central Africa has sufficient and reliable rainfall where cassava and other nongrain crops dominate food production. There is relatively little variability in this production compared with other subregions and consequently few large swings in import needs. Cereal imports mainly consist of wheat and some rice consumed in the cities. For Central Africa as a whole, drought was not a significant factor last year, except in the grain producing areas of southeastern Zaire and central and southern Angola. Because of inadequate domestic production, these two countries regularly import large amounts of corn, as well as wheat and rice.

Central Africa's status quo grain import requirements for 1984/85 are estimated at 870,000 tons. Nutrition-based needs are nearly twice as high, reflecting the poor nutritional levels in the subregion, particularly in Zaire. Two countries, Angola and the Congo, have comparatively small aid needs since they are important oil exporters with substantial commercial import capacity. Zaire's weak economy, marked by large debts and a host of other problems, is undergoing a major stabilization program. Status quo food aid requirements are estimated in the range of 30 percent of import needs. The Central African Republic and Equatorial Guinea are both small importers, but they have significant aid needs in proportion to their total needs.

Angola

Angola's agricultural sector remains in disarray largely because of war-related disruptions, which have limited the flow of produce into the cities, keeping import needs high. Angola will require an estimated 388,000 tons of grain imports for 1984/85. Aid needs are quite uncertain since reliable financial data are meagre. Aid needs could be reduced by expected improvements in export earnings next year.

Unlike many other countries in southern Africa, most of Angola had normal to above normal rainfall during the last growing season. However warfare and certain policy decisions caused large shortfalls in agricultural output. Communications and transportation have sustained severe disruptions and fighting has displaced thousands of farmers. The marketing system has virtually collapsed, and barter has largely replaced cash transactions. The emergency economic plan of 1983 included a shift of emphasis away from state farms to small-scale farmers to increase food production quickly. The Government acknowledged that peasants grow most of the food but had previously not been given adequate resources. Nevertheless, few improvements seem possible without reduced fighting.

Angola's foreign exchange problems should ease as oil production and exports expand over the next couple of years. Higher earnings are projected--even though oil prices will be steady--because of a favorable export outlook for Angola's increased production. Angola is not an OPEC member. The

country's other major exports, coffee and diamonds, continue to stagnate. It is not clear whether strict import controls, imposed 3 years ago when oil revenues dropped, will be lifted. Various goods are likely to remain in short supply and handicap economic growth because of continued military expenditures.

Central  
African  
Republic

Following the drought of early 1983 some food shortages developed in the Central African Republic (CAR). The estimated cereal import requirement for 1984/85 is 20,000 tons (excluding rice which is not calculated here). Food aid will be important because commercial imports can only cover an estimated 50 percent of status quo needs. Given the country's isolated, landlocked location, imports are very costly.

Most food in the CAR is produced on a subsistence basis. Agricultural data are poor, but normally the CAR is close to self-sufficiency. Imports are dominated by wheat consumed in urban areas. The drought led to reduced production of the major food--cassava--which apparently was also damaged by mealy bugs.

Current economic policy attempts to improve management and reduce large budget deficits. The 1983 drought hurt the economy, which was showing signs of ending the decline of recent years. Debts have been large and export earnings weak. The main export--diamonds--experienced problems with smuggling, while timber and tobacco exports have also declined. Cotton and coffee have improved, but the drought reduced coffee output last year.

Congo

The Congo's import requirements for grain for 1984/85 are estimated at 78,000 tons, mainly wheat. In addition, a small amount of rice, not calculated here, will also be required. The Congo's commercial import capacity is sufficient to finance most grain imports, although lower oil prices have caused some problems in the last 2 years. Normally, the country purchases relatively large amounts of higher-valued foods such as animal products and processed goods.

In early 1984, some food shortages occurred, but they were not as serious as those in most other African countries. The shortage appears related to the drought reduced production of cassava, the leading food. Low domestic food production also reflects many years of neglect and low investment. Little land is under production. The current development plan channels increased resources into the agricultural sector and infrastructural development; the latter should improve transportation and marketing. The Government has recently raised some producer prices and allowed some decentralization of marketing, but import reliance is not likely to diminish in the near future.

Over the last year, the Congo experienced some financial difficulties. Ambitious spending plans were formulated on the basis of continuing high oil prices. With the fall in expected earnings, the Congo resorted to heavier borrowing and debts have increased. The economy revolves almost entirely around oil and the only other important export is timber. However, with its oil wealth, the Congo remains one of the most prosperous countries in Sub-Saharan Africa.

#### Equatorial Guinea

This once prosperous Spanish colony was reduced to a state of subsistence barter under the dictatorial rule of Marcias Nguema (1968-79). The economy has yet to recover. Local roots and fruit now supply most dietary needs. Spain and the EC regularly donate grain, vegetable oil and dairy products. Efforts are underway to increase production of cocoa and coffee, formerly lucrative export crops.

All data from Equatorial Guinea are suspect: population estimates range from 240,000 to 360,000; root crop production numbers are even less certain. The status quo needs of 7,300 tons approximates the trend of grain imports. This figure is likely to grow rather than decline as consumers try to shift their diet from roots toward superior grains. The nutritional-based need is not calculated in this report because the necessary FAO data are not available. There is undoubtedly much room for improvement in the population's diet, especially through increased consumption of legumes, oilseeds, dairy and meat products not locally produced.

#### Zaire

Zaire's estimated grain import needs for 1984/85 total 399,000 tons, of which the country's commercial import capacity is only likely to cover about 60 percent. Domestic food production has risen in recent years, but serious food shortages have occurred for a number of reasons. In the Shaba region, normal imports of corn were interrupted in the last 2 years by drought in South Africa and Zimbabwe, the regular suppliers. Sharp increases in urban food prices, related to high marketing costs and recent economic changes, have further eroded the purchasing power of low-income groups. Average nutritional levels for Zaire are low, and the nutrition-based requirement for grain imports for 1984/85 of some 1.1 million tons is nearly three times the status-quo level.

In 1983, Zaire instituted major economic reforms that should improve growth prospects. The key measure was an 80 percent devaluation of its currency against the dollar, and consequent exchange rate reforms. The trade system was also liberalized and simplified, the budget deficit reduced, and some taxes increased. However, many of the immediate effects of these measures have been painful. Fuel prices were increased, raising transport costs and retail prices for other goods, including domestically produced food. The lower-valued currency also made

imported food and other goods more expensive. The inflation rate in Kinshasa soared to an estimated 76 percent in 1983, up from an already high 37 percent the year before.

Poor transportation is probably the largest obstacle to an improved agricultural sector. Some hopeful signs of progress include steps to rehabilitate or maintain some roads to markets and reduce the public sector's involvement in marketing. Corn has led recent improvements in staple crop output, with sharp increases in commercial production. Output of many cash crops has been uneven and coffee smuggling reportedly is still a problem.

The outlook for Zaire's external finances has improved over the last year, largely in response to its reforms. Zaire had some debt rescheduled through the Paris Club and gained an IMF standby arrangement. It reduced its deficits on the external current account and overall balance of payments. Despite continuing weak prices for the leading export, copper, the volume of mineral exports increased in 1983, raising total export revenues over 1982.



Table 20.--Central Africa basic food data

	: Actual or : :Actual or :targeted : Net : :forecast :beginning:imports:Nonfeed: Feed : Total : Actual : :production: stocks : : use : use : use : or :
--	--

--Continued

Table 20.--Central Africa basic food data

Country/commodity	: Actual or : forecast : production:	: Actual or : beginning : stocks :	: Net : imports :	: Use : Feed : use :	: Total : use :	: Actual : or : targeted :	: Actual or : forecast : population:	: Per : capita : nonfeed : use :	Commodities covered and share of daily per capita caloric intake
							Thousands	Kilos	Commodity Percent
<u>Eq. Guinea</u>									
Major cereals									
1980/81-1983/84:	0	0	3	3	0	3	335	8	
1983/84 prel.:	0	0	2	2	0	2	374	5	
1984/85 est.:	0	0	--	--	0	--	381	--	
1985/86 est.:	0	0	--	--	0	--	390	--	
Roots and tubers									
1980/81-1983/84:	82	0	0	82	0	83	--	251	
1983/84 prel.:	79	0	0	79	0	79	--	211	
1984/85 est.:	83	0	--	--	0	--	--	--	
1985/86 est.:	93	0	--	--	0	--	--	--	
<u>Zaire</u>									
Major cereals									
1980/81-1983/84:	860	57	321	1,191	0	1,191	30,221	39	Rice 2.88
1983/84 prel.:	928	51	226	1,243	0	1,188	31,475	38	Corn 9.59
1984/85 est.:	942	17	--	--	0	--	32,351	--	Millet and sorghum .63
1985/86 est.:	978	17	--	--	0	--	33,252	--	Cassava 57.97
								--	Wheat 1.80
									Total 72.88
Roots and tubers									
1980/81-1983/84:	13,835	0	0	13,835	0	13,835	--	458	
1983/84 prel.:	14,600	0	0	14,600	0	14,600	--	464	
1984/85 est.:	14,700	0	--	--	0	--	--	--	
1985/86 est.:	15,000	0	--	--	0	--	--	--	

-- Not applicable.

Table 21.--Central Africa food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates

--Continued

Table 21.--Central Africa food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates--continued

Country/ commodity	: Total use 1/		: Import requirements						: Food aid needs					
	: Forecast		: Status : Nutrit.						: Commercial					
	: domestic		: Quantity : Value						: import					
	: production:		: Status : Nutrit. : Status : Nutrit.						: capacity					
	: quo	: based	: quo	: based	: quo	: based	: quo	: based	: quo	: based	: quo	: based	: quo	: based
	-----1,000 tons-----						Million dollars		1,000 tons	Million dollars	1,000 tons	Million dollars	1,000 tons	Million dollars
<u>Eq. Guinea</u>														
Major cereals														
1984/85	0	3	NA	3	NA	--	--	--	--	--	--	--	--	--
1985/86	0	3	NA	3	NA	--	--	--	--	--	--	--	--	--
Roots and tubers														
1984/85	83	96	NA	13	NA	--	--	--	--	--	--	--	--	--
1985/86	93	98	NA	5	NA	--	--	--	--	--	--	--	--	--
Total above 2/														
1984/85	--	--	NA	7	NA	3	NA	1	1	6	NA	3	NA	NA
1985/86	--	--	NA	5	NA	2	NA	2	1	3	NA	1	NA	NA
<u>Zaire</u>														
Major cereals														
1984/85	942	1,276	1,680	334	738	--	--	--	--	--	--	--	--	--
1985/86	978	1,312	1,731	334	753	--	--	--	--	--	--	--	--	--
Roots and tubers														
1984/85	14,700	14,802	15,770	102	1,070	--	--	--	--	--	--	--	--	--
1985/86	15,000	15,215	16,201	215	1,201	--	--	--	--	--	--	--	--	--
Total above 2/														
1984/85	--	--	--	369	1,111	86	258	259	60	111	852	26	198	
1985/86	--	--	--	408	1,172	92	264	312	70	96	859	22	193	
<u>Central Africa, total</u>														
Major cereals														
1984/85	--	--	--	870	1,736	185	385	--	--	269	1,136	58	259	
1985/86	--	--	--	760	1,676	160	365	--	--	97	1,000	23	226	

1/ The sum of targeted nonfeed and feed use.

2/ Cereal equivalent.

-- Not applicable.

NA = Not available

Table 22.--Summary of Central Africa cereal import requirements and food aid needs to support consumption 1984/85 1/

Country	: 1984/85		: 1984/85	
	: 1983/84		: Import requirements:	
	: Cereal		: Status : Nutrit.	
	: imports		: Status : Nutrit.	
	: quo	: based	: quo	: based
	-----1,000 tons-----			
Angola	295	393	436	131
Cent. Afr. Rep.	24	22	76	12
Congo	65	78	114	9
Eq. Guinea	2	7	NA	6
Zaire	226	369	1,111	111
Central Africa, total	612	869	1,737	269

1/ Cereal equivalent.

Table 23.--Central Africa financial indicators, actual and projected

Country and year	Inter- : : : :				Debt : : : :				1984 and 1985 conditions as of April 1984
	national : reserves : :(on 12/31):	Exports : (fob) : exchange:	Imports : (fob) : :	:	service : due : :	:	:	:	
	Million dollars								
<u>Angola</u>									
1980-83	NA	NA	NA	NA	NA	NA	NA	NA	Lower oil prices and stagnant exports of diamonds and coffee held back export revenues in the last 2 years, forcing import restrictions. Increases in the volume of oil exports should boost earnings in 1984 and 1985.
1983 prel.	NA	NA	NA	NA	NA	NA	NA	NA	
1984 est.	NA	NA	NA	NA	NA	NA	NA	NA	
1985 est.	NA	NA	NA	NA	NA	NA	NA	NA	
<u>Cent. Afr. Rep.</u>									
1980-83	53.3	120.5	163.8	8.6	20.4	21	26.5	26.5	Drought in 1983 retarded economic recovery and output of coffee, an important export crop, while the diamond sector continued to experience problems. Some gains have been realized in cotton.
1983 prel.	43	105	175	20.4	20.4	21	26.5	26.5	
1984 est.	46.4	125	190	21	21	21	26.5	26.5	
1985 est.	50.3	135	220	26.5	26.5	21	26.5	26.5	
<u>Congo</u>									
1980-83	70.2	1042.6	730.6	216.2	381.3	365.9	323.3	323.3	Export earnings were below projections in 1983 because of lower prices for oil. This has led to a squeeze on spending and adjustment of development plans.
1983 prel.	34.5	1078	909.7	381.3	381.3	365.9	323.3	323.3	
1984 est.	37.3	1200	925	365.9	365.9	365.9	323.3	323.3	
1985 est.	40.5	1300	1150	323.3	323.3	365.9	323.3	323.3	
<u>Eq. Guinea</u>									
1980-83	0	16.7	45.2	0	9.8	10	8	8	A revival of lumber shipments and possible royalties from oil may yield some foreign exchange earnings.
1983 prel.	4.7	18.7	57	9.8	9.8	10	8	8	Entrance into the Central African Bank Union may help to stabilize the ekuele and return the economy
1984 est.	5	18	60	10	10	10	8	8	uncertainty prevades the Equato-Guinean financial situation; it will likely continue to rely on external assistance for several more years.
1985 est.	7	22	65	8	8	10	8	8	
<u>Zaire</u>									
1980-83	149.3	1628.8	1250.8	322.2	666	605.8	596.9	596.9	Debt rescheduling, devaluation, and other reforms were undertaken in 1983 in response to severe economic problems. These should improve growth prospects. Some improvements in mineral exports in 1983 could continue in 1984.
1983 prel.	116.7	1523	1113	666	666	605.8	596.9	596.9	
1984 est.	126.2	1590	1155	605.8	605.8	605.8	596.9	596.9	
1985 est.	136.7	1740	1210	596.9	596.9	605.8	596.9	596.9	



Table 24.--Central Africa import requirements and aid needs to support cereal stock adjustments 1/

Country	Estimated stock			Import requirements			Aid needs		
	: increment			: Quantity			: Quantity		
	Quantity	Value	Status	Nutrit.	Status	Value	Nutrit.	Status	Value
	: quo	: based	: quo	: based	: quo	: based	: quo	: based	: quo
	1,000 tons	Million dollars	1,000 tons	1,000 tons	Million dollars	1,000 tons	1,000 tons	Million dollars	Million dollars
Zaire									
Cereals									
1984/85	18	4	387	1,129	90	262	129	870	30
1985/86	13	3	421	1,185	95	267	109	872	25
Total									
1984/85	--	4	--	--	90	262	--	--	30
1985/86	--	3	--	--	95	267	--	--	25

1/ Includes only countries for which cereal stock data are available.  
 -- Not applicable.

EAST AFRICA  
SUBREGION

The nine countries in the East Africa region require status quo grain imports of 2.2 million tons in 1984/85, while nutrition based needs are 4.5 million tons. Of the area's status quo import needs, nearly 75 percent will have to be covered by food aid. Ethiopia, Tanzania, and Somalia require the most status quo aid. All three are plagued by severe shortages of foreign exchange because of decreased export earnings.

Sudan and Kenya have fairly high food aid requirements. Sudan can pay for only 20 percent of its status quo grain imports, while Kenya can buy about 30 percent. Both countries have substantial debt service payments. The grain imports of Rwanda and Burundi are comparatively small. Uganda's cereal import and aid needs are low, while Djibouti can afford to purchase all of its grain requirements.

The large difference between the region's status quo and nutrition based grain import needs is accounted for by Ethiopia, Uganda, and Kenya. In both Ethiopia and Uganda, official grain production data underestimate total production, resulting in lower than actual food availabilities. However, there is some malnutrition in each of the countries. In Kenya, the composition of the diet may have changed since the FAO minimum requirements were drawn up, exaggerating the gap between status quo and nutrition-based grain import requirements.

In 1983, grain harvests were above trend in Uganda, near trend in Kenya and Tanzania, and below trend in Ethiopia, Sudan, and Somalia.

Burundi

Burundi's grain import needs for 1984/85 are estimated at 31,000 tons at the status quo level. This poor country is highly dependent on aid, with estimated commercial imports only sufficient to cover 37 percent of needs. Wheat is its chief import, as Burundi produces most of its food domestically. Roots, tubers, bananas, and beans are the main foods. Burundi's food balance is precarious. Caloric intake has declined over the past decade and nutrition based grain import needs at 77,000 tons are more than double status quo. Despite a generally favorable climate for agriculture, there is heavy pressure on the land and yields are poor.

The economy revolves around coffee, which accounts for nearly 90 percent of export revenue. Recently, prices have firmed, which should improve earnings in 1984. Trade is difficult, however, because of lengthy and awkward routes involving high costs. Burundi devalued its currency by some 40 percent late in 1983 and introduced austerity measures in its 1984 budget in response to lower-than-targeted economic growth.

Djibouti

Djibouti's status quo grain import requirements are forecast at 46,000 tons in 1984/85. The country is estimated to have the capacity to import 55,000 tons commercially. In 1983, total

grain imports were 43,000 tons, mostly rice, wheat, and flour. About 15,000 tons were provided as food assistance, mostly through the U.S. P.L. 480 Title II program. Djibouti has a balance of payments surplus, adequate foreign exchange reserves, and a small external debt.

Because most of its land is desert, Djibouti has a limited agricultural sector, primarily devoted to fruit and vegetables. There is almost no grain production.

The majority of the population has an adequate diet. Through donor assistance programs, most of the estimated 20,000 refugees within the country receive sufficient amounts of food. Still, some low-income urban dwellers and a number of untargeted refugees suffer from malnutrition.

## Ethiopia

Ethiopia's total cereal imports in 1983/84 are estimated at 332,000 tons, somewhat above the 2 previous years, but well below 1980/81's 394,000 tons. For 1984/85, status quo grain import needs are estimated at 589,000 tons, while nutrition based requirements are 1.4 million tons. Two factors explain this difference. First, there is serious malnutrition in several districts of Ethiopia. Incidents of death by starvation were reported in 1983. Second, the grain output series used in our calculations may understate domestic production, which would enlarge import demand under nutrition based methods.

For technical and political reasons, there are discrepancies in Ethiopian cereal production data. Total 1983 production is estimated between 5 and 6 million tons, and it is difficult to determine if this is above or below trend. Before 1979, statistics published by the Government of Ethiopia underestimated total production. Since then, there has been a change in sampling techniques and a higher level of output has been reported. However, the higher production figures have been released at the same time as accounts of drought-reduced crops.

Ethiopia continued to have serious food shortages in several regions in early 1984. Because of low rainfall, grain production was off again in the northern districts of Tigre, Wello, and Eritrea. In the south, grain crops in Sidamo were reduced by drought. Yet rainfall in other areas was sufficient, and grain crops were average to above average.

The country is estimated to have the capacity to purchase 105,000 tons of cereal commercially in 1984/85. Yet, in 1983, nearly all of Ethiopia's grain imports were in the form of food aid, from the World Food Program, the EC, Canada, and Australia.

## Kenya

Weak domestic cereal production, coupled with rising demand for wheat, has increased pressure on stocks and raised Kenya's cereal import requirements. Despite favorable weather in 1983, shortages of inputs, such as fertilizer and credit--combined with reduced corn acreage--led to a 15-percent production decline. Corn is Kenya's staple cereal, providing 40 percent of caloric intake. If there were no significant drawdown of stocks, and per capita corn consumption were maintained at its relatively high level of the base period, (as this report's status quo food aid needs calculation assumes), Kenya would have substantial corn import and food aid requirements. However, it is more likely that stocks will be drawn down, and per capita corn consumption will fall, before corn is imported to meet domestic demand. Wheat imports are expected to increase as demand has grown faster than domestic production.

Higher world tea and coffee prices should increase Kenya's export earnings and somewhat alleviate severe foreign exchange constraints. Kenya's international reserves were up at the end of 1983, but foreign exchange earnings must be considerably higher before import growth rates can return to previous levels. Kenya's increasing food aid needs reflect a rising debt service cost.

Kenya's 1984/85 status quo import requirements in grain equivalent are 338,000 tons, but would be about 209,000 if the unlikely import requirement for corn were eliminated. Kenya actually exported 105,000 tons of corn in 1983/84. With commercial import capacity estimated at 109,000 tons, 229,000 tons (109,000 tons excluding corn) will have to be financed on concessional terms. In 1983, cereal imports financed by aid reached 124,000 tons.

## Rwanda

Rwanda is largely self-sufficient in food and imports relatively small amounts of grain, mainly wheat. Status quo import needs for 1984/85 are estimated at 51,000 tons in grain equivalent, although this is unrealistically high by historical levels. Estimated food aid requirements are large because of Rwanda's weak financial position, but are probably overstated at 89 percent of status quo needs. No major food shortages presently exist, although the feeding of refugees has required additional food aid.

Rainfall is usually adequate to abundant in Rwanda and the diversified array of foods produced tends to cushion shortfalls of any one commodity. However, this is Africa's most densely populated country; there is severe pressure on the land and reports of soil erosion are mounting. Future productivity will have to be significantly improved to keep pace with high population growth.



Some progress has been made in diversifying exports away from coffee, which now accounts for about 80 percent of export earnings. Tea exports have been increasing and should benefit from higher prices in 1984. Tin exports have begun to recover, but face less favorable market prospects. Imports, however, are much higher than exports and the Government has attempted to scale these down by higher tariffs. In 1983, the currency was tied to Special Drawing Rights (SDR's) rather than the dollar since it was overvalued against those of its main trading partners.

#### Somalia

In 1984/85, Somalia's status quo grain import requirement is estimated at 405,000 tons, while the nutrition based import need is 252,000 tons. The difference results from the fact that Somalia's cereal consumption levels have exceeded the minimums recommended by FAO.

Estimates indicate that the country will have the capacity to import only 105,000 tons of grain commercially in 1984. Somalia is seriously short of foreign exchange, because of the 1983 decline in its leading export--live animals--resulting from a rinderpest (cattle plague) scare.

Dry weather in late 1983 reduced Somalia's grain output by 25 percent from the previous year's record. Total production was 293,000 tons, mainly sorghum and corn. Cereal imports were 190,000 tons, more than 50 percent below average annual imports in the 5 preceding years. The decline resulted from a slump in commercial imports and from delays in concessional grain deliveries. Because of reduced production and low imports, large stock drawdowns were required in 1983 to maintain consumption levels. Producers consumed grain from on-farm storage, and government stocks were depleted.

While there were serious pockets of malnutrition during the refugee influx in the late 1970's, the food situation has improved in the 1980's as donors responded with increased food assistance. Furthermore, the number of refugees has declined from a peak of about 800,000 to less than 400,000 in 1984. The food shortages that appeared in late 1983 and early 1984 have been mainly in the import-dependent urban areas.

#### Sudan

Sudan's status quo cereal import requirements in 1984/85 are estimated at 334,000 tons, net of 188,000 tons of exported sorghum. Nutrition based cereal import needs are higher at 582,000 tons. The bulk of total grain imports will continue to be wheat and flour.

The country is estimated to have the capacity to commercially import only 66,000 tons of grain in 1984/85 and will be heavily dependent on food aid. Sudan suffers from a severe shortage of foreign exchange, external debts of \$7 billion, and a \$500-million balance-of-payments deficit.



Although Sudan exports large quantities of sorghum, the country is a net grain importer, with substantial purchases of wheat and flour, and smaller amounts of rice. Total wheat and flour imports increased slightly in 1983 to 500,000 tons, most of which was from the United States under the P.L. 480 Program and the Commodity Import Program. About 25,000 tons of rice were imported. Urbanization, rising incomes, population growth, and subsidized bread prices have all served to increase import demand for wheat.

Sudan's total 1983 grain output was 2.6 million tons, with sorghum accounting for over 75 percent. Total cereal production was slightly above the previous year's, but well below the record harvest of 1981. Dry weather in northwestern Sudan in 1983 reduced the sorghum crop in that area. Wheat production expanded 20 percent to 172,000 tons in 1983 because of increased plantings and government irrigation schemes.

#### Tanzania

Tanzania's poor performance in both food and export crop production, coupled with foreign exchange constraints and high debt service, has created large food aid requirements. Tanzania's 1983 corn output declined about 5 percent because of dry weather, lower use of fertilizers and chemicals--especially by small farmers--and delayed payments by the National Milling Corporation (NMC). The 1984 outlook is for production to again fall short of consumption, resulting in a gap of about 240,000 tons. Over the past 4 years, rice production stagnated, and per capita rice consumption has dropped, reaching about 10 kg (milled) during 1980/81-1983/84. Imports for 1983/84 were estimated at 72,000 tons. While wheat production has increased since 1978, per capita consumption has remained at 6 kg during the last 4 to 5 years. Imports in 1983/84 were estimated at 43,000 tons.

Tanzania's poor export performance has resulted in a continued large negative trade balance and lack of foreign exchange. Export earnings dropped sharply in 1982, and Tanzania's international reserves were almost completely depleted. The nation's debt service payment has increased to about 28 percent of export earnings. Commercial import capacity for 1984/85 is estimated at \$34 million.

In recent years, Tanzania's precarious financial position has caused food aid to cover the bulk of its food imports. In 1982/83, commercial imports were about 26,000 tons, and food aid covered 84 percent of Tanzania's 164,000 tons of cereal imports. According to preliminary estimates, imports increased to 334,000 tons in 1983/84. About 30 percent, or 103,000 tons, were on a commercial basis and the rest was aid. Tanzania's status quo food aid needs are estimated at 306,000 tons for 1984/85, 70 percent of total import requirements.

## Uganda

In 1983, Uganda's agricultural production increased for the third straight year. This, coupled with improved export earnings has reduced status quo food aid requirements, but nutrition-based food aid needs remain large. Total food production is now near its early 1970's peak, but per capita food production is still about 20 percent below the USDA estimate for the base period 1969-71. Conditions for early 1984 harvests were generally favorable.

The decline in per capita corn consumption has stopped, but millet and sorghum consumption now exceed that of corn. Most food is produced on a subsistence basis and total production is hard to estimate. This may partially account for the large nutrition-based import requirement of 599,000 tons in 1984/85, compared with status quo import requirements of 33,000 tons. Uganda is much less dependent on corn, wheat and rice than other countries in eastern and southern Africa. Uganda's 1983 cereal imports have been estimated at only about 15,000 tons, including 13,000 tons of wheat--all covered by food aid.

Commercial import capacity for 1984/85 has improved to 33,000 tons and status quo food aid needs, grain equivalent, are nil. The debt service ratio should be reduced to about 30 percent in 1984. Export revenues are expected to improve in this year, led by favorable coffee earnings.

Table 25.--East Africa basic food data

--Continued

Table 25.--East Africa basic food data--continued

Country/commodity	: Actual or :		: Use :		: Actual :		: Per :		: Commodities covered	
	: Actual or :	: targeted :	: Net :	: :	: or :	: Actual or :	: capita :	: and share of daily		
	: production :	: stocks :	: imports :	: Nonfeed :	: Feed :	: Total :	: targeted :	: forecast :	: nonfeed :	: per capita
	: :	: :	: use :	: use :	: use :	: ending :	: population :	: use :		: caloric intake
	-----1,000 Tons-----					Thousands	Kilos	Commodity	Percent	
<u>Rwanda</u>										
Major cereals										
1980/81-1983/84:	262	0	16	278	0	278	0	5,389	52	Corn 5.64
1983/84 prel. :	264	0	19	283	0	283	0	5,670	50	Sorghum 11.06
1984/85 est. :	281	0	--	--	0	--	0	5,868	--	Cassava 10.41
1985/86 est. :	290	0	--	--	0	--	0	6,074	--	Sweet potatoes 15.44
										Wheat .79
										Plantains 26.45
										Total 69.79
Roots and tubers										
1980/81-1983/84:	3,455	0	0	3,455	0	3,455	0	--	642	
1983/84 prel. :	3,465	0	0	3,465	0	3,465	0	--	611	
1984/85 est. :	3,670	0	--	--	0	--	0	--	--	
1985/86 est. :	3,790	0	--	--	0	--	0	--	--	
<u>Somalia</u>										
Major cereals										
1980/81-1983/84:	333	264	403	728	8	736	264	4,963	147	Wheat 3.88
1983/84 prel. :	293	334	190	718	8	726	91	4,990	144	Rice 2.98
1984/85 est. :	338	91	--	--	8	--	91	5,010	--	Corn 18.43
1985/86 est. :	349	91	--	--	8	--	91	5,090	--	Sorghum 17.29
Milk										Milk 20.46
1980/81-1983/84:	544	0	15	559	0	559	0	--	113	Total 63.05
1983/84 prel. :	545	0	15	560	0	560	0	--	112	
1984/85 est. :	540	0	--	--	0	--	0	--	--	
1985/86 est. :	545	0	--	--	0	--	0	--	--	
<u>Sudan</u>										
Sorghum										
1980/81-1983/84:	2,322	163	-316	1,987	20	2,007	163	19,619	102	Wheat 9.15
1983/84 prel. :	1,979	150	-280	1,729	20	1,749	100	20,609	84	Rice .23
1984/85 est. :	2,400	100	--	--	22	--	100	21,280	--	Corn 1.02
1985/86 est. :	2,500	100	--	--	22	--	100	21,982	--	Sorghum 35.33
Wheat										Millet 8.87
1980/81-1983/84:	168	75	434	602	0	602	75	--	31	Peanuts 6.88
1983/84 prel. :	172	60	500	672	0	672	60	--	33	Total 61.48
1984/85 est. :	170	60	--	--	0	--	60	--	--	
1985/86 est. :	175	60	--	--	0	--	60	--	--	
Other cereals										
1980/81-1983/84:	468	50	21	481	8	489	50	--	25	
1983/84 prel. :	428	42	25	453	7	460	35	--	22	
1984/85 est. :	465	35	--	--	8	--	35	--	--	
1985/86 est. :	471	35	--	--	9	--	35	--	--	
Vegetable oils										
1980/81-1983/84:	641	35	-64	587	0	587	25	--	30	
1983/84 prel. :	522	30	-45	497	0	497	10	--	24	
1984/85 est. :	530	10	--	--	0	--	10	--	--	
1985/86 est. :	550	10	--	--	0	--	10	--	--	

--Continued





Table 26.—East Africa food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates

Country/ commodity	Total use 1/				Import requirements				Commercial import capacity	Food aid needs			
	Forecast	Status		Nutrit.	Quantity		Value	Quantity		Value			
	domestic	production:	quo	based	Status	Nutrit.	Status	Nutrit.		Status	Nutrit.		
	:	:	:	:	:	:	:	:		:	:		
	:	:	:	:	:	:	:	:	:	:	:	:	:
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Table 26.--East Africa food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates--continued

Country/ commodity	: Total use 1/ :				: Import requirements :				: Food aid needs						
	Forecast :	Status :	Nutrit. :	Quantity :	Value :	Status :	Nutrit. :	Commercial import capacity :	Quantity :	Value :	Status :	Nutrit. :	Status :	Nutrit. :	
	production: quo :	based :	based :	Status :Nutrit.:	Status :Nutrit.:	Status :Nutrit.:	Status :Nutrit.:	quo : based :	quo : based :	quo : based :	quo : based :	quo : based :	quo : based :	quo : based :	
	:	:	:	quo :	based :	quo :	based :	:	quo :	based :	quo :	based :	quo :	based :	
								1,000 tons	Million dollars	1,000 tons	Million dollars	1,000 tons	Million dollars	1,000 tons	Million dollars
-----1,000 tons-----															

--Continued

Table 26.—East Africa food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates--continued

Country/ commodity	:	: Total use 1/ :					: Import requirements :				: Food aid needs			
	:	: Forecast :		:			:		Commercial	:				
	:	domestic	:Status	:Nutrit.	Quantity	Value	:	import	:	Quantity	Value	:		
	:	:production:	quo	: based	:Status	:Nutrit.	:Status	:Nutrit.	capacity	:Status	:Nutrit.	:Status	:Nutrit.	
:	:	:	:	quo	: based	quo	: based	:	:	quo	: based	quo	: based	
	:	-----1,000 tons-----					Million dollars		1,000	Million	1,000 tons		Million dollars	
	:								tons	dollars				
Uganda	:													
Major cereals	:													
1984/85	:	1,260	1,290	1,786	30	526	--	--	--	--	--	--	--	--
1985/86	:	1,310	1,324	1,840	14	530	--	--	--	--	--	--	--	--
Roots and tubers	:													
1984/85	:	6,790	6,519	6,924	-271	134	--	--	--	--	--	--	--	--
1985/86	:	7,005	6,689	7,250	-316	245	--	--	--	--	--	--	--	--
Total above 2/	:													
1984/85	:	--	--	--	-15	599	-3	126	33	7	0	565	0	119
1985/86	:	--	--	--	-45	599	-9	122	37	8	0	570	0	114
Pulses	:													
1984/85	:	320	319	--	-1	4/	3/	0	4/	3/	0	0	0	0
1985/86	:	330	327	--	-3	-1	3/	3/	4/	3/	0	0	0	0
Total	:													
1984/85	:	--	--	--	--	--	0	126	--	7	--	--	0	119
1985/86	:	--	--	--	--	--	0	122	--	8	--	--	0	114
East Africa, total	:													
Major cereals, roots:	:													
1984/85	:	--	--	--	2,236	4,517	390	864	--	--	1,642	3,893	280	754
1985/86	:	--	--	--	2,043	4,507	418	882	--	--	1,469	3,907	292	756
Pulses	:													
1984/85	:	320	319	320	0	0	0	0	--	--	0	0	0	0
1985/86	:	330	327	329	-3	-1	-1	3/	--	--	0	0	0	0
Vegetable oils	:													
1984/85	:	--	--	--	112	0	134	0	--	--	104	0	125	0
1985/86	:	--	--	--	113	0	115	0	--	--	103	0	104	0
Total	:													
1984/85	:	--	--	--	--	--	998	864	--	--	--	--	405	754
1985/86	:	--	--	--	--	--	997	882	--	--	--	--	396	756

1/ The sum of targeted nonfeed and feed use.

2/ Cereal equivalent.

3/ Less than 500,000 dollars.

4/ Less than 500 tons.

Not applicable.

NA Not available.

Table 27.--Summary of East Africa cereal import requirements  
and food aid needs to support consumption 1/

Country	:	:	1984/85		:	1984/85	
	:	1983/84	: Import requirements:		:	Aid needs	
	:	Cereal	Status	Nutrit.	:	Status	Nutrit.
	:	imports	quo	based	:	quo	based
	:		-----1,000 tons-----				
Burundi	:	16	31	77	:	20	65
Djibouti	:	43	46	NA	:	0	NA
Ethiopia	:	322	589	1,401	:	480	1,293
Kenya	:	43	338	933	:	229	824
Rwanda	:	19	51	96	:	45	90
Somalia	:	190	405	252	:	296	143
Sudan	:	245	334	582	:	266	472
Tanzania	:	340	442	577	:	306	441
Uganda	:	0 <u>2/</u>	0	599	:	0	565
East-Africa, total	:	1,218	2,236	4,517	:	1,642	3,893

1/ Cereal equivalent.

2/ Negative net cereal imports, and food imports and aid needs shown as zero.

Table 28.--East Africa financial indicators, actual and projected

Country and year	Inter- national reserves (on 12/31):	Exports (fob)	Imports (fob)	Debt service due	1983 and 1984 conditions as of April 1984
Million dollars					
<b>Burundi</b>					
1980-83	52.95	80.8	156.9	7.4	Foreign reserves declined rapidly in the early 1980's while export earnings were sluggish. Devaluation at the end of 1983 and a reasonable outlook for coffee prices could improve export performance in 1984.
1983 prel.	27.57	99	155	13.1	
1984 est.	29.80	110	200	18.4	
1985 est.	32.29	120	225	25.5	
<b>Djibouti</b>					
1980-83	75.2	119.5	215	3.4	A service-oriented economy, Djibouti has almost no exports, other than re-exports to neighboring countries. With rising imports of food, consumer goods, and capital equipment, the merchandise trade account is in deficit. However, the country has a balance of payments surplus because of large transfer receipts.
1983 prel.	75	234	241	3.5	
1984 est.	75	244	250	3.6	
1985 est.	82.5	250	255	3.7	
<b>Ethiopia</b>					
1980-83	174.6	396.5	719.7	52.3	A slump in sales of Ethiopia's leading export, coffee, coupled with higher imports, has resulted in an increase in the trade deficit. Yet foreign aid, remittances, and loans have offset most of the negative trade balance, leaving a small balance of payments deficit.
1983 prel.	169.9	390.9	924.7	78.3	
1984 est.	183.7	426.2	1063.4	89.3	
1985 est.	199.0	492.2	1225.4	90.6	
<b>Kenya</b>					
1980-83	327.7	1060.3	1836.8	304.9	Kenya's foreign exchange earnings and international reserves improved as coffee, and particularly world tea prices rose in late 1983 and into 1984. Tea export earnings of about \$200 million in 1983 set a record but coffee earnings continued to be limited by quotas. Kenya has an immediate need for increased imports so that economic growth can return to a higher level, and in order to meet continued high debt service costs.
1983 prel.	376	975	1560	349.4	
1984 est.	214.2	1000	1670	322.6	
1985 est.	232.1	1114.4	1800	352.6	
<b>Rwanda</b>					
1980-83	152.0	121.6	206.1	3.9	A proportionately large trade deficit led to efforts to scale down imports in 1983. The export outlook for 1984 appears favorable based on firm coffee and tea prices.
1983 prel.	120.0	125	210	6	
1984 est.	129.7	145	225	7	
1985 est.	140.6	155	250	10.1	
<b>Somalia</b>					
1980-83	23.5	149.9	472.1	17.4	A precipitous decline in livestock and animal product exports in 1983 led to a worsening of the trade deficit. The foreign exchange situation is deteriorating, with the result that commercial food imports were seriously cut in 1983. Although there has been some improvement in the capital account balance, the balance of payments deficit has worsened.
1983 prel.	13	120	643	25	
1984 est.	15	150	742	30	
1985 est.	25	200	855	35	
<b>Sudan</b>					
1980-83	26.3	569.5	1138.0	87.6	Sudan's merchandise trade deficit has declined slightly with an improvement in export performance. However, a substantial increase in debt repayment has contributed to a doubling of Sudan's balance of payments deficit. The external debt is over \$8 billion, a result of excessive borrowing in the late 1970's. A serious foreign exchange scarcity has held down imports, cut gasoline supplies, and caused input shortages.
1983 prel.	19.1	390.9	1030.2	100	
1984 est.	20.7	426.2	1184.8	120	
1985 est.	22.4	492.2	1365.2	130	
<b>Tanzania</b>					
1980-83	12.1	495.9	901.5	84	Export earnings increased slightly in 1983. Tanzania was not able to take full advantage of improved prices as its production of export crops remained stagnant. Debt service costs have risen sharply, and export earnings have declined since 1977. International reserves are less than 2 percent of the 1977 level.
1983 prel.	4.67	481	700	118.1	
1984 est.	5.05	530	960	152.1	
1985 est.	5.48	580	1100	158.2	
<b>Uganda</b>					
1980-83	15.25	296.75	291	88.5	Uganda's coffee production has recovered but its exports are now limited by the I.C.O. quota. Coffee accounted for 98 percent of export earnings but cotton and tea exports may contribute about 5 percent to improved export earnings in 1984. The debt service is expected to remain high.
1983 prel.	14	316	285	153	
1984 est.	15	340	330	101	
1985 est.	16	350	350	90	



Table 29.--East Africa import requirements and aid needs to support cereal stock adjustments <sup>1/</sup>

Country	Estimated stock		Import requirements				Aid needs			
	increment		Quantity		Value		Quantity		Value	
	Quantity	Value	Status	Nutrit.	Status	Nutrit.	Status	Nutrit.	Status	Nutrit.
	: quo	: based	: quo	: based	: quo	: based	: quo	: based	: quo	: based
	1,000 tons	Million dollars	1,000 tons		Million dollars		1,000 tons		Million dollars	
<u>Ethiopia</u>										
Cereals										
1984/85	95	15	684	1,496	105	230	575	1,388	89	213
1985/86	65	10	754	1,577	112	235	625	1,448	93	215
Total										
1984/85	--	15	--	--	105	230	--	--	89	213
1985/86	--	10	--	--	112	235	--	--	93	215
<u>Kenya</u>										
Cereals										
1984/85	45	9	383	978	75	192	274	869	54	171
1985/86	92	17	496	1,104	94	209	368	976	69	185
Total										
1984/85	--	9	--	--	75	192	--	--	56	173
1985/86	--	17	--	--	94	209	--	--	72	187
<u>Somalia</u>										
Cereals										
1984/85	90	22	495	342	120	83	386	233	94	57
1985/86	63	15	469	314	110	74	324	169	76	40
Total										
1984/85	--	22	--	--	125	202	--	--	99	176
1985/86	--	15	--	--	114	186	--	--	80	152
<u>Sudan</u>										
Cereals										
1984/85	85	20	419	667	99	158	351	557	83	133
1985/86	45	10	379	637	87	146	296	509	68	117
Total										
1984/85	--	20	--	--	233	158	--	--	208	142
1985/86	--	10	--	--	202	146	--	--	172	127
<u>Tanzania</u>										
Cereals										
1984/85	6	2	448	583	112	145	312	447	78	111
1985/86	4	1	476	610	114	147	307	442	74	106
Total										
1984/85	--	2	--	--	112	145	--	--	79	113
1985/86	--	1	--	--	114	147	--	--	76	108

<sup>1/</sup> Includes only countries for which cereal stock data are available.

-- Not applicable.

SOUTHERN  
AFRICA  
SUBREGION

Drought continued over much of Southern Africa during the 1983/84 growing season, keeping food production down and import requirements high. The cumulative effects of 2 to 3 consecutive years of bad weather have been substantial in most of the countries. In Malawi, rainfall was sufficient, however, allowing an excellent corn crop for the second year in a row and leaving some surplus for export in the subregion. The island of Madagascar was hit by heavy storms and flooding in 1983/84, leading to some rice shortages.

For 1984/85, the subregion's grain import needs on a status quo basis are estimated at 1.9 million tons, with aid requirements likely to comprise over 60 percent at 1.3 million. (The model used for this report excludes Botswana and Zimbabwe, two countries with needs at roughly 830,000 tons of grain import status quo consumption levels. Both countries are discussed in the narrative.) On a nutrition basis, import requirements are calculated to increase to almost 2.8 million tons.

Another drought-reduced corn crop in South Africa also affected the food situation in the subregion. South Africa will likely only make some small corn exports to Botswana, Lesotho, and Swaziland and be a large importer itself. This implies heavy use of South African ports by many countries and the need for carefully planned logistics. Most of the imported corn will be yellow rather than the preferred white so there will be some blending of domestic and imported supplies.

Botswana

Botswana's cereal import requirements in 1984/85 will again be relatively high at an estimated 130,000 tons, chiefly corn and sorghum. The 1984 cereal harvest is estimated to be under 10,000 tons and stocks are very low. Botswana is not included in the aid needs estimation model so aid requirements have not been calculated, but they are expected to be significant. Known pledges for 1983/84 were nearly 40,000 tons.

Although export earnings were up in 1983 primarily because of a stronger diamond market, additional financial resources are crucial for economic growth and employment generation. With successive droughts, the Government has been providing much food relief throughout the country from its own resources.

Comoros

Comoran grain-equivalent import needs for 1984/85 are forecast at 31,000 tons on a status quo basis and 70,000 tons on a nutritional basis. Transportation and financial constraints account for much of the difference; as in many archipelagic nations, the food distribution system is weak and malnutrition is widespread. Most food imports are supplied on concessional or grant terms.

The Comoros is one of the poorest nations in the world: per capita GDP in 1980 was \$337. The Comoros relies on exports of ylang-ylang (used in perfume) and of cinnamon, vanilla, and cloves for foreign exchange. The agricultural prospects of the

islands are not bright, although it is estimated that Comoros has the arable land necessary for staple food self-sufficiency, were land reform undertaken.

A donor conference to coordinate aid projects for Comoros was held in May, 1984. The Comoros is a former French colony. After Comoran independence in 1975, Franco-Comoran relations soured over the issue of the island of Mayotte, whose residents voted to stay with France rather than merge with the new nation. Since the late 1970's, however, relations have improved considerably and with them the flow of French assistance. Most Comorans are Muslim, and Saudi Arabia and other Muslim donor nations on the Arabian peninsula have expressed interest in assisting Comoran development. These nations were present at the May conference.

The improvement of the Mahaya airport and the construction of a deep water point at Mutsamudu should help relieve the economic isolation that has plagued the islands. Lack of port facilities has hindered the distribution of food aid which frequently has been necessary following tropical storms that regularly cross the archipelago.

#### Lesotho

Lesotho did not require significant food aid until very recently. Following a 5-year decline in agricultural production, drought lowered 1983 per capita food production to only 72 percent of the 1974-76 base period and overwhelmed Lesotho's import capacity. The drought reduced cereal output to 70 percent of the harvest in 1981, which was the last year of normal rainfall. The 1983 corn crop, at 76,000 tons, was well below imports of 85,000 tons. The 1984 corn and sorghum crops probably will be larger, due to improved weather. Sorghum production should also improve, but wheat output may be down to 15,000 tons, about the same as in 1983.

Until 1983/84, about 85 percent of Lesotho's cereal imports were commercially financed--even when they rose to a high of 160,000 tons in 1982/83. However, the severe drought brought 1983/84 import requirements to a record 180,000 tons, with food anticipated aid at a record 76,000 tons.

Status quo cereal import requirements are estimated at 286,500 tons in 1984/85. Commercial import capacity for 1984/85 is about 81,500 tons. Nutrition-based cereal import requirements are about the same as status quo requirements.

#### Madagascar

Madagascar's grain equivalent import needs are estimated at 437,000 for 1984/85 to maintain consumption at historic levels. Actual imports, mostly rice, are likely to be between 250,000 and 300,000 tons because recent price increases are expected to reduce demand for imports. Nutrition-based needs are about 60 percent of status-quo needs.

The 1983/84 Malagasy rice crop was damaged by four tropical storms. The one in mid-April 1984 caused considerable damage to major producing areas in the north of the island. Rainfall since November 1983 has been far above normal and flooding has damaged paddies, as well as the fragile road system. Food shortages and starvation are reported in the rice deficit provinces of the south. A similar series of tropical storms in February 1982 forced Madagascar to import 354,000 tons of rice. Despite the storm damage, imports are not likely to exceed 225,000 tons. Malagasy per capita rice consumption is the world's highest, and rice provides well over half the caloric intake.

Madagascar's debt service ratio increased from 55 percent in 1982 to 77 percent in 1983. The Malagasy Government, along with the IMF, adopted policies to promote rice self-sufficiency and conserve foreign exchange. Producer and consumer rice prices have been raised sharply and rice prices in urban areas are no longer controlled. It was hoped that market forces would encourage greater marketed production and more efficient distribution; however, storm damage will hinder domestic trade this crop year.

Although Madagascar has made dramatic agricultural policy changes under IMF conditionality, negotiations over Madagascar debt have not gone well in 1984. International relief has been timely and generous in the wake of the storms and may ameliorate the financial situation. However, Madagascar's balance of payments is not likely to improve until 1985, and foreign exchange will remain scarce.

#### Malawi

Malawi was one of the few southern African countries with increased agricultural production in 1983, although per capita food production may have dropped slightly. Corn output was a record 1.5 million tons. Per capita consumption was generally maintained and small quantities of corn have been exported since 1982. The outlook is good for the 1984 corn harvest. Although still at a very low level, per capita wheat consumption has increased with imports. Malawi received 17,000 tons of cereals in food aid after the drought-damaged crop of 1980. However, subsequent food aid has been small.

Production of Malawi's major agricultural export crops--tobacco, tea, and sugar--was good in 1983, but lower tobacco prices, and continued low sugar prices, plus transportation blockages, resulted in static export earnings. Reserves remained low and debt service costs rose sharply.

Import capacity is estimated at 45,000 tons for 1984/85, enough to cover status quo needs. Nutrition based needs are higher, at an estimated 146,000 tons.



## Mauritius

Mauritius imports almost all of its staple foods. Rice and wheat import needs for 1984/85 are estimated by the food aid model at 153,000 tons. Over 90 percent of its arable land is devoted to sugar for export. The country has a modest debt and its balance of payments--although in deficit--is not critical, and even improved in 1983. This occurred even though both the U.S. and the EC have been limiting imports of Mauritian textiles, the country's principle foreign exchange earner.

Per capita income in Mauritius exceeds \$1,000. Mauritius's relative wealth, healthy financial position, and its reliance on grain imports from the United States, France, and Australia, probably account for the fact that the 1983 drought, and the devastation wrought by tropical storms in December 1983, were generally ignored by international donors. Market vegetable and orchard fruit production were hard hit. Damage to roads, bridges, and communications was considerable. The estimated 85,000 ton shortfall in sugar production will mean a loss of \$20 million in foreign exchange earnings. Tea exports are estimated down 25 percent.

## Mozambique

Mozambique's status quo import needs for 1984/85 are estimated at 638,000 tons of cereal, with food aid requirements at 490,000 tons. This aid figure is quite uncertain since financial data for our model are lacking. Corn is the major grain required, followed by wheat and rice. Additional protein needs, not estimated here, are also required to make up for shortfalls in pulse and livestock production. Nutritional based needs are more than double the status quo estimate, reflecting low consumption levels.

For the second consecutive year Mozambique faces a desperate food situation as drought persisted over much of the country in 1983/84. Agricultural production has also been adversely affected by anti-government guerilla movements. Fighting and sabotage have displaced some farmers and disrupted transportation and marketing. A tropical cyclone brought sudden heavy rains to the southern part of Mozambique early in 1984, and flooding caused major crop and livestock losses and damage to infrastructure.

Many thousands of hunger-related deaths have been reported in the last year, particularly in the hardest hit provinces of Gaza and Inhambane. Thousands of people have also fled into neighboring Zimbabwe. Food aid shipments increased in response to Mozambique's severe needs, but these were apparently not sufficient to cover severe shortages. Furthermore, distribution of aid was seriously handicapped by the guerilla movement and the country's chronic logistical problems.

Because of drought conditions in the south of Mozambique, even irrigated production has been reduced because of low river levels and equipment problems. Cassava production was also down so that this root crop--often used as a food reserve when grains fail--was unavailable as a substitute. Many farmers who were



forced to replant their crops during the last two seasons because of rainfall problems ran short of seed. Inputs are generally lacking.

Another critical factor that has checked agriculture in Mozambique has been a shortage of basic consumer goods; farmers lack incentives to increase output and sell their produce. This is related to weak marketing and the extremely poor state of the economy. The Government began to undertake promising policy changes in 1983, such as investing more in the small-scale and private farm sector, rather than in large state farms. Unfortunately, no dramatic recovery can be expected given the current situation and limited resources.

#### Swaziland

Swaziland's agricultural production showed good gains until the droughts began in 1982. In 1983, cereal production was 42,000 tons, less than half of the 1981 output. A good recovery is expected in 1984. Per capita corn consumption has trended downward since the late 1970's, and cereal imports have risen sharply to over 100,000 tons during 1983/84. Food aid rose from a minimal 1,000 tons in 1981/82 to 10,000 in 1983/84. Most commercial food imports come from South Africa. Based on an improved crop outlook for 1984, status quo cereal import requirements for 1984/85 are estimated at 50,000 tons. Nutrition-based import requirements are 63,000 tons. Status quo food aid needs for 1984/85 are about 33,000 tons.

Swaziland is heavily dependent on sugar for its export earnings. While the country has increased sugar production, a lower world price reduced export earnings, and Swaziland's trade balance and foreign reserves deteriorated. Commercial import capacity for 1984/85 is estimated at only 17,000 tons.

#### Zambia

Zambia's grain import requirements for 1984/85 are estimated at 376,000 tons, with corn accounting for about two-thirds. Over half of these needs are likely to depend on aid, since the economy continues very weak. Production of corn, Zambia's staple, will be well under domestic needs for the third consecutive year because of unfavorable weather. Although Zambia generally has received more rain overall than countries to the south, drought hit some important growing areas, offsetting the effect of large plantings. Marketed corn production in 1983/84 was 540,000 tons--some 200,000 tons below domestic utilization--and marketings for 1984/85 are expected to be similar.

In recent years, Zambia has made a strong effort to revitalize its agricultural sector, led by an incentive pricing policy. Policy changes have stimulated increases in area planted. However, the economic stabilization program that includes cutting subsidies and decontrolling some prices has also contributed to

higher inflation and increased costs. Fertilizer prices, for example, went up an average of 60 percent in 1983. A reported drop in use mainly affected corn. Efforts to increase output of sorghum and cassava to lessen dependence on corn have had little effect so far. Wheat production, all irrigated, remains small and accounts for only about 10 percent of consumption. Output of rice, a less important food, is improving.

The economy remains mired in recession, with no quick recovery forecast. Severe balance of payments problems and heavy debt service requirements are likely to persist and only moderate price gains are projected for Zambia's major export--copper--in the next two to three years. The devaluation of the currency in 1983 and further depreciation against other major currencies makes imports, including agricultural inputs and food, more expensive. The devaluation and other economic reforms, made with the support of the IMF, should help recovery over the longer run.

#### Zimbabwe

Another year of drought has dramatically changed the food situation in Zimbabwe, bringing tight supplies and some localized shortages. Estimated corn import requirements for 1984/85 are 600,000 tons, with some adjustment likely depending on the current harvest. Wheat import needs are likely to be in the vicinity of 100,000 tons. During the previous year, Zimbabwe also had a poor corn crop but large stocks enabled it to avoid imports and even meet some previous export commitments. However, supplies were rationed when impending shortages became apparent.

In the last 3 years, Zimbabwe received small amounts of food aid, mainly wheat, while it was a supplier of corn to other countries through the World Food Program. Because of its recent history as a food exporter, Zimbabwe has not been included in our model and precise aid estimates have not been calculated. For 1984/85, aid needs will be substantial. The country has operated its own drought relief program for the past 2 years and recently refugees from Mozambique have moved into Zimbabwe. The economy has been severely affected by the world recession and drought. Zimbabwe has increased borrowing leading to sharply higher debts, while a number of austerity measures have been introduced. Foreign exchange is very short. Although the outlook for tobacco and cotton exports is bright in 1984, mineral and manufacturing exports are not likely to improve greatly.

Table 30.--Southern Africa basic food data

	: Actual or : forecast	: targeted : beginning :	: Net : imports :	: Nonfeed : use :	: Feed : use :	: Total : use :	: Actual : or : targeted :	: Actual or : forecast :	: Per capita nonfeed : use :	: Commodities covered and share of daily per capita caloric intake
Country/commodity	: production :	: stocks :	:	:	:	:	: ending : stocks :	: population:	:	:
			-1,000 tons				Thousands	Kilos		Commodity Percent
<u>Comoros</u>										
Major cereals										Rice 27.80
1980/81-1983/84:	3	0	28	31	0	31	0	424	72	Cassava 25.68
1983/84 prel. :	3	0	34	37	0	37	0	442	84	Bananas 16.11
1984/85 est. :	3	0	--	--	0	--	0	455	--	Total 69.60
1985/86 est. :	3	0	--	--	0	--	0	501	--	
Roots and tubers										
1980/81-1983/84:	73	0	0	73	0	73	0	--	173	
1983/84 prel. :	75	0	0	75	0	75	0	--	170	
1984/85 est. :	76	0	--	--	0	--	0	--	--	
1985/86 est. :	86	0	--	--	0	--	0	--	--	
<u>Lesotho</u>										
Major cereals										Wheat 25.80
1980/81-1983/84:	178	0	164	320	22	342	0	1,387	231	Corn 36.98
1983/84 prel. :	122	0	180	280	22	302	0	1,438	195	Sorghum 13.47
1984/85 est. :	79	0	--	--	24	--	0	1,473	--	Total 76.26
1985/86 est. :	175	0	--	--	24	--	0	1,508	--	
<u>Madagascar</u>										
Major cereals										Wheat 1.84
1980/81-1983/84:	1,502	0	316	1,818	0	1,818	0	9,023	202	Rice 58.13
1983/84 prel. :	1,517	0	299	1,816	0	1,816	0	9,388	193	Corn 4.28
1984/85 est. :	1,503	0	--	--	0	--	0	9,622	--	Total 64.24
1985/86 est. :	1,619	0	--	--	0	--	0	9,868	--	
<u>Malawi</u>										
Major cereals										Corn 65.17
1980/81-1983/84:	1,316	0	0	1,267	50	1,317	0	6,380	198	Wheat 1.20
1983/84 prel. :	1,500	0	-120	1,330	50	1,380	0	6,687	199	Total 66.37
1984/85 est. :	1,410	0	--	--	54	--	0	6,900	--	
1985/86 est. :	1,420	0	--	--	56	--	0	7,121	--	
<u>Mauritius</u>										
Major cereals										Wheat and flour 21.10
1980/81-1983/84:	0	0	147	147	0	147	0	982	150	Rice 30.83
1983/84 prel. :	0	0	142	142	0	142	0	1,007	141	Total 51.93
1984/85 est. :	0	0	--	--	0	--	0	1,024	--	
1985/86 est. :	0	0	--	--	0	--	0	1,042	--	
<u>Mozambique</u>										
Major cereals										Wheat 4.88
1980/81-1983/84:	522	0	416	938	0	938	0	12,550	75	Rice 3.40
1983/84 prel. :	377	0	510	887	0	887	0	13,046	68	Corn 18.59
1984/85 est. :	448	0	--	--	0	--	0	13,412	--	Sorghum 9.19
1985/86 est. :	651	0	--	--	0	--	0	13,794	--	Millet .30
										Cassava 37.07
										Total 73.44
Roots and tubers										
1980/81-1983/84:	2,713	0	0	2,713	0	2,738	0	--	217	
1983/84 prel. :	2,300	0	0	2,300	0	2,300	0	--	176	
1984/85 est. :	2,700	0	--	--	0	--	0	--	--	
1985/86 est. :	2,850	0	--	--	0	--	0	--	--	
<u>Swaziland</u>										
Major cereals										Corn 55.37
1980/81-1983/84:	76	0	66	93	49	142	0	605	153	Sorghum .86
1983/84 prel. :	42	0	103	97	48	145	0	632	153	Milk 4.39
1984/85 est. :	102	0	--	--	52	--	0	651	--	Total 60.62
1985/86 est. :	92	0	--	--	54	--	0	670	--	
Milk										
1980/81-1983/84:	37	0	7	44	0	44	0	--	72	
1983/84 prel. :	36	0	7	43	0	43	0	--	68	
1984/85 est. :	38	0	--	--	0	--	0	--	--	
1985/86 est. :	39	0	--	--	0	--	0	--	--	
<u>Zambia</u>										
Major cereals										Wheat 8.13
1980/81-1983/84:	996	33	278	1,249	34	1,283	22	6,134	204	Rice .73
1983/84 prel. :	1,025	17	258	1,253	35	1,288	12	6,445	194	Corn 53.12
1984/85 est. :	1,019	12	--	--	37	--	12	6,664	--	Total 61.97
1985/86 est. :	1,172	12	--	--	38	--	12	6,891	--	

-- Not applicable.

Table 31.--Southern Africa food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates

Country/ commodity	: Total use 1/		: Import requirements				Commercial import capacity	: Food aid needs						
	: Forecast		: Status		: Quantity			: Value		: Quantity		: Value		
	: domestic		: Nutrit.		: Status			: Nutrit.		: Status		: Nutrit.		
	: production	: quo : based	: Status	: Nutrit.	: Status	: Nutrit.		: Status	: Nutrit.	: Status	: Nutrit.	: Status	: Nutrit.	
	: quo	: based	: quo	: based	: quo	: based		: quo	: based	: quo	: based		: quo	: based
	-----1,000 tons-----				Million dollars		1,000 tons	Million dollars	1,000 tons		Million dollars			
Comoros														
Major cereals														
1984/85	3	33	30	30	27	--	--	--	--	--	--	--	--	--
1985/86	3	36	31	33	28	--	--	--	--	--	--	--	--	--
Roots and tubers														
1984/85	76	79	214	3	138	--	--	--	--	--	--	--	--	--
1985/86	86	87	222	1	136	--	--	--	--	--	--	--	--	--
Total above 2/														
1984/85	--	--	--	31	70	9	21	9	3	23	61	6	18	
1985/86	--	--	--	33	70	10	20	9	3	24	61	7	18	
Lesotho														
Major cereals														
1984/85	79	365	349	286	270	54	51	81	15	204	189	39	36	
1985/86	175	373	379	198	204	36	37	95	18	103	108	19	20	
Madagascar														
Major cereals														
1984/85	1,503	1,940	1,779	437	276	119	75	76	21	361	200	99	55	
1985/86	1,619	1,989	1,840	370	221	98	59	79	21	291	142	77	38	
Malawi														
Major cereals														
1984/85	1,410	1,424	1,551	13	146	3	32	45	10	0	101	0	22	
1985/86	1,420	1,469	1,601	49	181	10	39	65	14	0	117	0	25	
Mauritius														
Major cereals														
1984/85	0	153	140	153	140	43	39	159	45	0	0	0	0	
1985/86	0	156	142	156	142	42	39	190	52	0	0	0	0	
Mozambique														
Major cereals														
1984/85	448	1,003	1,378	555	930	--	--	--	--	--	--	--	--	
1985/86	651	1,032	1,436	380	785	--	--	--	--	--	--	--	--	
Roots and tubers														
1984/85	2,700	2,932	3,940	206	1,140	--	--	--	--	--	--	--	--	
1985/86	2,850	3,015	4,055	139	1,205	--	--	--	--	--	--	--	--	
Total above 2/														
1984/85	--	--	--	638	1,428	128	286	149	30	480	1,279	98	256	
1985/86	--	--	--	436	1,268	85	246	153	30	283	1,115	55	216	

--Continued

Table 31.--Southern Africa food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates--continued

[illegible]

1/ The sum of targeted nonfeed and feed use.

2/ Cereal equivalent.

3/ Less than 0.5.

-- Not applicable.



Table 32.--Summary of Southern Africa cereal import requirements and food aid needs to support consumption 1/

Country	:	:	1984/85		:	1984/85	
	:	1983/84	:Import requirements:		:	Aid needs	
	:	Cereal	: Status	: Nutrit.	:	Status	: Nutrit.
	:	imports	: quo	: based	:	quo	: based
	:						
	:		<u>-1,000 tons-</u>				
	:						
	:						
Comoros	:	34	31	70		23	61
	:						
Lesotho	:	180	286	270		204	189
	:						
Madagascar	:	299	437	276		361	200
	:						
Malawi	:	0 <u>2/</u>	13	146		0	101
	:						
Mauritius	:	142	153	140		0	0
	:						
Mozambique	:	510	638	1,428		490	1,279
	:						
Swaziland	:	103	50	63		33	46
	:						
Zambia	:	258	376	470		199	294
	:						
Southern Africa, total	:	1,526	1,984	2,863		1,310	2,170
	:						

1/ Cereal equivalent.

2/ Negative net cereal imports, and food import and aid needs shown as zero.

Table 33.--Southern Africa financial indicators, actual and projected

Country and year	Inter- national reserves (on 12/31):	Exports (fob)	Imports (fob)	Debt service due	1983 and 1984 conditions as of April 1984
Million dollars					
<u>Comoros</u>					
1980-83	5.5	10.7	15.2	.8	
1983 prel.	5	9	17	1.6	
1984 est.	5	8	18	2	
1985 est.	5.5	8.8	19.8	2.7	
<u>Lesotho</u>					
1980-83	52	364.7	459	10.4	Merchandise exports declined to only about \$36 million in 1983. They made up about 10 percent of foreign exchange earnings as remittances provide the bulk of foreign exchange. Remittances are not likely to increase rapidly.
1983 prel.	67	336	575	20.4	
1984 est.	48	383	662	24.8	
1985 est.	52	420	763	9.7	
<u>Madagascar</u>					
1980-83	0	358.7	526.0	167.3	Devaluation and the world economic recovery will not improve Madagascar's financial outlook. Exports will be held down by stiff competition in the world coffee market and the loss of clove sales to Indonesia. Import restrictions will continue in 1984.
1983 prel.	0	315	567.5	272.8	
1984 est.	0	320	602.6	238	
1985 est.	0	345	662.9	261.8	
<u>Malawi</u>					
1980-83	38.9	264.1	260.7	82.4	While Malawi increased tobacco and corn exports in 1983, tea exports dropped, and continued low world sugar prices resulted in a slight decrease in total exports. Reserves dropped and debt service cost escalated.
1983 prel.	15.4	235	207.8	109.3	
1984 est.	22.9	265	224.5	100.9	
1985 est.	24.8	306	256	79.3	
<u>Mauritius</u>					
1980-83	47.9	356.3	487.1	53.2	Import restrictions imposed against Mauritian wool sweater exports by the United States and the European Community have severely dampened the earnings prospects of Mauritius' Export Processing Zone. The drought-reduced sugar crop--the major export--in conjunction with low sugar prices will also cut foreign exchange earnings.
1983 prel.	30	355	500	78.9	
1984 est.	30	355	540	76.5	
1985 est.	33	405	594	84.1	
<u>Mozambique</u>					
1980-83	NA	NA	NA	NA	Drought and continued guerilla insurgency contributed to depressed export earnings in 1983. Debt repayment problems developed, as invisibles and other financial flows were not enough to offset the chronic merchandise trade deficit. Severe foreign exchange shortages continue to restrict essential imports.
1983 prel.	NA	NA	NA	NA	
1984 est.	NA	NA	NA	NA	
1985 est.	NA	NA	NA	NA	
<u>Swaziland</u>					
1980-83	107	336	432	16.5	Continued low world sugar prices have resulted in reduced export earnings as sugar accounts for nearly 50 percent of exports. Negative trade balances have grown larger since 1977 when the last positive trade balance was achieved.
1983 prel.	94	305	475	20	
1984 est.	84	333	530	22	
1985 est.	91	360	575	25	
<u>Zambia</u>					
1980-83	66.0	1087	966.5	223.6	Serious debt and foreign exchange problems persist, with only slight gains in copper prices in 1983. Prices continued weak in the first half of 1984 and the volume of Zambia's exports could be down. Austerity and stabilization measures qualified Zambia for IMF support in 1983, but more will be necessary this year.
1983 prel.	62.6	950	750	126.2	
1984 est.	67.7	1000	775	421.1	
1985 est.	73.3	1100	850	404.9	

Table 34.--Southern Africa import requirements and aid needs to support cereal stock adjustments 1/

Country	Import requirements				Aid needs			
	Estimated stock		Quantity		Quantity		Value	
	Increment	Value	Status	Nutrit.	Status	Nutrit.	Status	Nutrit.
	Quantity	Value	quo	based	quo	based	quo	based
	1,000 tons	Million dollars	1,000 tons	Million dollars	1,000 tons	Million dollars	1,000 tons	Million dollars
Zambia								
Cereals								
1984/85	8	1	384	478	207	302	35	51
1985/86	6	1	277	406	64	192	10	32
Total								
1984/85	--	1	--	--	--	--	35	51
1985/86	--	1	--	--	--	--	10	32

1/ Includes only countries for which cereal stock data are available.

-- Not applicable.

MIDDLE EAST  
SUBREGION

Countries requiring food aid in the Middle East are Lebanon, North Yemen, and South Yemen. The region's status quo grain import needs in 1984/85 are 1.36 million tons, while nutrition based import requirements are 1.38 million tons. Estimates indicate that about 20 percent of the countries' cereal imports will need to be provided as food aid. The status quo cereals aid need in 1984/85 is 237,000 tons, which is more food assistance than the countries have received in the past. Most of the assistance is required by North and South Yemen.

Lebanon's foreign exchange reserves are still large, allowing it to commercially import the bulk of its grain. However, Lebanon does receive some food aid for war displaced individuals, currently numbering about 150,000. While North and South Yemen have generally purchased most of their grain imports, the ability of the two countries to buy grain is declining as the receipt of worker remittances from the Gulf drops. Increasing import demand and deteriorating financial conditions raise the countries' food aid requirements.

Lebanon's June 1984 cereals harvest is expected to be below trend because of low rainfall. The winter 1983 grain harvest in North Yemen was severely reduced by drought. Because of serious flood damage to farmland, South Yemen's 1983 grain harvest was low, and the outlook for the 1984 crop is pessimistic.

Lebanon

Lebanon is estimated to require 552,000 tons of grain imports in 1984/85 to maintain status quo consumption levels. The nutrition based import need is 610,000 tons. Total grain imports in 1983 were 423,000 tons, nearly 25 percent below the preceding 5-year average. But, because the Government had large stocks of imported wheat, diets were not seriously affected.

In the past, Lebanon has been able to commercially import wheat, flour, corn, and rice. The country's bilateral agreement with Canada to purchase 150,000 tons of wheat annually was suspended in 1983 because of a price dispute. Instead, the Government increased purchases from the EC, the United States, and Argentina. As a trade transit area in the Middle East, Lebanon exported 39,000 tons of corn, barley, and wheat in 1983.

With large foreign exchange reserves, Lebanon is estimated to be able to continue to purchase all of its grain requirements commercially in 1984/85. However, the country will receive some food aid from the UN World Food Program to assist 150,000 people displaced by the war.

Lebanon's grain production in 1983 continued to be less than 50 percent of levels in the late 1970s. Total output in 1983 was 25,000 tons of wheat, barley, and corn. Fighting in the Bekaa Valley and a shift of land to lucrative horticultural crops have reduced cereals production.

## North Yemen

North Yemen's status quo cereal imports needs in 1984/85 are forecast at 534,000 tons, while nutrition based requirements are estimated at 494,000 tons. The difference occurs because per capita grain availabilities have recently exceeded minimum nutritional requirements. Despite the country's large supply of grain, there is some malnutrition, particularly among young children.

Grain imports in 1983 were a record 594,000 tons, mainly wheat and flour supplied by the United States under the Blended Credit Program, which provided commercial credit at below market interest rates. Almost all of 1983's grain imports were commercially purchased. Yemen is expected to be able to purchase 482,000 tons--nearly all of its requirements--in 1984/85. The receipt of \$1 billion a year in expatriate remittances has bolstered the country's foreign exchange reserves.

Because of a drought, Yemen's 1983 grain production was 60 percent below the average output of the preceding 5 years. Total cereal production, mostly sorghum, was 317,000 tons.

## South Yemen

South Yemen's grain imports were a near record 259,000 tons in 1983. Of this, about 16,000 tons were provided as food assistance. Both status quo and nutrition-based methods indicate that the country will require grain imports of 270,000 tons or more in 1984/85. While average per capita grain availabilities are near FAO minimums, some malnutrition still exists in the countryside.

South Yemen's main cereal import is Australian wheat purchased under a bilateral agreement. The country has an estimated capacity to commercially purchase 154,000 tons of grain in 1984/85. A decline in expatriate worker remittances has tightened foreign exchange reserves, making the country more dependent on food aid.

Total grain production was considerably below trend in both 1982 and 1983, due to severe 1982 floods that damaged irrigation infrastructure and farmland. Cereal output in 1983 was only 64,000 tons, compared with more than 100,000 tons in years of favorable rainfall.



Table 35.--Middle East basic food data

Country/commodity	: Actual or : forecast : production :	: Actual or : beginning : stocks :	: Net : imports :	Use		: Actual : or : targeted : ending : stocks :	Thousands	Kilos	Commodity	Percent
				: : Feed : use :	: : Nonfeed : use :					
							-----1,000 tons-----			
<u>Lebanon</u>										
Major cereals										
1980/81-1983/84:	28	72	587	509	52	561	55	3,139	Wheat	48.58
1983/84 prel.	25	79	462	475	52	527	0	3,262	Rice	2.40
1984/85 est.	38	0	--	--	55	--	0	3,295	Corn	2.12
1985/86 est.	42	0	--	--	55	--	0	3,328	Barley	.08
									Total	53.18
<u>North Yemen</u>										
Major cereals										
1980/81-1983/84:	671	129	513	1,179	40	1,219	92	5,444	Wheat	15.04
1983/84 prel.	317	142	594	1,026	27	1,053	0	5,647	Rice	.51
1984/85 est.	767	0	--	--	43	--	0	5,799	Corn	4.43
1985/86 est.	776	0	--	--	45	--	0	5,956	Sorghum	44.88
									Barley	1.38
									Total	66.24
<u>South Yemen</u>										
Major cereals										
1980/81-1983/84:	93	49	247	329	12	341	49	1,978	Wheat	25.91
1983/84 prel.	64	56	259	337	12	349	30	2,049	Rice	10.72
1984/85 est.	91	30	--	--	12	--	30	2,098	Corn	2.78
1985/86 est.	97	30	--	--	13	--	30	2,148	Sorghum	1.14
									Millet	18.02
									Barley	.00
									Total	58.57

-- Not applicable.

Table 36.---Middle East food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates

Country/ commodity	Forecast		Total use 1/		Import requirements		Commercial import		Food aid needs				
	domestic	Status	Nutrit.	:	Quantity	Value	:	Quantity	:	Value			
	production:	quo	:	Status	Nutrit.	Status	Nutrit.	Status	Nutrit.	Status	Nutrit.		
	:	:	:	quo	:	based	quo	:	based	quo	:	based	

1/ The sum of targeted nonfeed and feed use.  
-- Not applicable.

Country	1984/85			1984/85	
	1983/84	Import requirements		Aid needs	
	Cereal	Status	Nutrit.	Status	Nutrit.
	imports	quo	based	quo	based
		-----1,000 tons-----			
Lebanon	462	552	610	0	56
North-Yemen	594	534	494	125	85
South-Yemen	259	271	279	112	120
Middle-East, total	1,315	1,357	1,383	237	261

Table 38.--Middle East financial indicators, actual and projected

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Table 39.--Middle East import requirements and aid needs to support cereal stock adjustments 1/

Country	Import requirements				Aid needs			
	Estimated stock		Quantity		Quantity		Value	
	1,000 tons	Million dollars	Status : quo	Nutrit. : based	Status : quo	Nutrit. : based	Status : quo	Nutrit. : based
<u>Lebanon</u>								
Cereals								
1984/85	27	4	579	637	107	25	83	14
1985/86	18	3	572	631	103	26	85	14
Total	--	--	--	--	107	--	--	14
1984/85	--	--	--	--	103	--	--	14
1985/86	--	--	--	--	103	--	--	14
<u>North Yemen</u>								
Cereals								
1984/85	47	10	581	541	117	172	132	29
1985/86	34	7	595	552	116	228	189	37
Total	--	10	--	126	117	--	--	29
1984/85	--	7	--	125	116	--	--	37
1985/86	--	--	--	125	228	--	--	37
<u>South Yemen</u>								
Cereals								
1984/85	15	4	286	295	127	--	135	38
1985/86	10	3	283	292	142	--	150	42
Total	--	4	--	--	84	--	--	38
1984/85	--	3	--	--	81	--	--	42
1985/86	--	--	--	--	79	--	--	40

1/ Includes only countries for which cereal stock data are available.

-- Not applicable.

## Asia

### SOUTH ASIA SUBREGION

South Asia cereal production increased over 13 percent in 1983/84, with India, Bangladesh, and Pakistan harvesting record crops. Gains were largest in India, where rice production rebounded strongly from the drought-affected 1982/83 crop. In Nepal, however, harvests remained below the 1981/82 record. The subregion's net cereal imports declined to about 5 million tons, as smaller Indian imports and larger Pakistani exports offset larger purchases by Bangladesh, Sri Lanka, Nepal, and Afghanistan.

The subregion's cereal stocks rose 3.6 million tons to about 25.5 million tons in 1983/84. However, most gains occurred in India, while stocks in Bangladesh and Sri Lanka remained significantly below food security needs. Production of pulses, an important source of vegetarian protein in many South Asian diets, rose only marginally in 1983/84. While pulse production picked up in Pakistan, it stagnated in India, leading to a shortage of protein and rising pulse imports. South Asian vegetable oil output jumped over 10 percent in 1983/84, as a rebound in Indian production more than offset a sharp decline in Pakistan.

More modest gains in South Asian cereal production are forecast for 1984/85, particularly in India, following significant above-trend increases in 1983/84. Wheat production is forecast to rise about 3 percent, while rice production is expected to return to trend and decline by 1 to 2 percent. Actual production, however, will depend on the 1984 monsoon that begin in late June. Small gains are expected in pulse production. Edible oil output is likely to rebound in Pakistan, but more moderate gains are likely elsewhere in the subregion.

Status quo-based estimates suggest that about 2 million tons of cereal imports are needed in 1984/85, with Bangladesh (1.1 million) and Sri Lanka (.7 million) accounting for the bulk. India, Nepal, and Pakistan are forecast to have no status quo cereal imports needs. Except in Pakistan, the status quo import needs for the subregion are considered to be biased downward by a year or more of abnormally low per capita food availability during the 1980/81-1983/84 base period, as well as the generally poor nutritional status of the populations. In Bangladesh and Sri Lanka, the estimates do not sufficiently account for the need for more cereal stocks.

For the subregion as a whole, the status quo estimates support cereal availabilities at only 90 percent of what is needed to achieve the FAO recommended minimum diet, with particularly severe nutritional deficits in Nepal, Bangladesh, and Sri Lanka. The nutrition-based calculations estimate South Asian cereal import needs at 14.8 million tons which, while quite large, are significantly below the 18-million-ton gap estimated in 1983/84.



While the nutrition-based import need estimates are well above what could be feasibly supplied to, or absorbed by, the subregion's economies, they are indicative of the need to boost actual aid allocations above those suggested by the status quo calculations, particularly in Nepal, Bangladesh, and Sri Lanka.

Status quo estimates indicate no pulse import needs in the region in 1984/85. Estimates for India, however, are biased downward by steadily declining per capita production. The nutrition-based calculation shows India has a huge, 2.9-million-ton deficit of pulses and needs sizable supplies of pulses and other protein-rich foods. The status quo estimate of 1984/85 edible oil import needs of 1.7 million tons is in line with recent actual imports in the subregion. The lower nutrition-based estimate is probably unrealistic because the 1975-1977 base period used in this estimate predates recent gains in edible oil consumption.

The balance of payments position of most South Asian countries improved somewhat in 1983/84 due to gradual gains in exports and worker remittances, and stable petroleum import costs. Continued gradual improvement is expected for 1984/85. However, the ability of several countries, including Nepal, Bangladesh, and Sri Lanka, to import food without disrupting imports of industrial raw materials and capital goods needed for development will remain very limited. About 40 percent of the subregion's status quo cereal import needs, and 80 percent of nutrition-based needs would have to be provided through food aid in 1984/85. Status quo estimates of aid needs for pulses and vegetable oils are small, but a large proportion of India's nutrition-based deficit in pulses would have to be provided through food aid.

Trend production projections for 1985/86 indicate little change in status quo import needs for cereals, pulses, and vegetable oils, while aid needs decline about 10 percent because of some improvement in commercial import capacity. Nutrition-based cereal import and aid needs are projected to decline about 13 percent and 18 percent, respectively.

#### Afghanistan

Information on agricultural production and the food supply situation in Afghanistan has been limited since the Soviet invasion in late 1980. Food grain production appears to have stabilized at about 3.1 million tons annually, down substantially from the pre-incursion level of nearly 4 million tons. However, the departure of approximately 5 million refugees, mostly to Pakistan and Iran, has probably reduced pressure on available food supplies.

Status quo estimates indicate import needs of about 150,000 tons, while the nutrition-based calculations set import needs at 189,000 tons. Corresponding food aid need estimates are 20,000 tons and 59,000 tons, respectively. Aid needs for 1985/86 are likely to remain near the 1984/85 level.

## Bangladesh

Rice production in Bangladesh was up nearly 0.6 million tons in 1983/84 to 14.8 million, and is projected to increase to 15.4 million tons in 1984/85 because of improved price incentives and input supplies. Wheat production should also continue to expand because the Government is promoting wheat as a substitute for rice. However, a slowing in the growth rate of wheat production is expected because current Government efforts to boost minor irrigation strongly favor relatively more profitable winter rice cultivation compared with wheat.

For 1984/85, status quo food grain import requirements are calculated at 1.1 million tons, compared with actual imports of around 2.3 million tons in 1983/84. The 1984/85 import requirements for wheat and, to a much lesser extent rice, are biased downward by the relatively low stocks held in the early 1980's, as well as the chronically low levels of per capita food grain availabilities. Additional imports of 300,000-600,000 tons of food grains would be necessary to achieve the Government's postharvest stock target of 1.2-1.5 million tons of rice and wheat. Adjusting for stock building, status quo import requirements for 1984/85 are estimated at a minimum of 1.4 million tons. Given current projections, 1985/86 import requirements will remain about the same.

To achieve the FAO recommended minimum level of per capita caloric intake, nearly 6 million tons of cereal imports are estimated to be needed in both 1984/85 and 1985/86. While only about two-thirds of this volume could be absorbed by the local public distribution system (PDS), the magnitude reflects the very substantial and continuing nutritional gap. The status quo estimates support per capita cereal consumption at only 79 percent of what is required to achieve the FAO recommended minimum diet.

Vegetable oil production grew more than 5 percent in 1983/84 to 73,000 tons, but accounted for less than one-half of consumption. Vegetable oil output is not expected to keep pace with consumption because current agricultural policy emphasizes food grain production. For 1984/85, status quo vegetable oil import needs are calculated at 122,000 tons, compared with actual imports of 116,000 tons in 1983/84. However, diversion of scarce foreign exchange to higher priority food grain imports and high world vegetable oil prices reduced 1983/84 imports from the record 174,000 tons a year earlier. To achieve the FAO recommended minimum diet, 130,000 tons of vegetable oil imports would be needed in 1984/85. Imported vegetable oil, like imported food grain, is distributed through the PDS, which could easily accommodate the volume required to close the gap between current consumption and nutrition-based requirements.

Bangladesh's ability to commercially import food improved marginally in 1983/84, as good harvests and a belated recovery in the manufacturing sector boosted real GDP growth to 4.3 percent. Bangladesh's balance of payments, however, remains burdened by a

massive structural trade deficit and heavy dependence on foreign aid. Export earnings cover less than one-third of the import bill. Expected increases in exports and worker remittances suggest that the balance of payments will remain manageable in 1984/85. But Bangladesh could encounter serious import financing problems if, into the late 1980's, its import requirements remain at a level necessary to sustain 5-percent real growth in GDP.

Food aid will continue to be critical in allowing Bangladesh to manage its balance of payments, stabilize domestic food grain prices, and improve its food security. Approximately 1.6 million tons (or 70 percent) of Bangladesh's 1983/84 food grain import requirements were satisfied by concessional sources. In both 1984/85 and 1985/86, nearly 1 million tons, or 70 percent, of the country's status quo cereal import needs of 1.4 million tons will have to be provided from concessional sources. About 5.2 million tons of cereal food aid would be required in each year to close the nutritional gap.

#### India

India's cereal supply situation improved significantly in 1983/84 as production rebounded to a record high. The rice harvest was 22 percent larger than the drought-affected 1982/83 crop, and nearly 6 percent above the previous record. The 1983 wheat crop, at 42.5 million tons, was a record for the third straight year. Government-held cereal stocks improved substantially due to record domestic procurement and additional wheat and rice imports of about 3.3 million tons (July/June). Government cereal stocks are forecast at close to the Government's target of about 21 million tons as of July 1984. However, most of the stock buildup was in wheat; rice stocks will remain about 2 million tons below target. Production of pulses, a key source of protein in India's predominantly vegetarian diets, increased only marginally in 1983, leading to further deterioration in per capita availabilities. Liberal import regulations and strong domestic prices led to record pulse imports of about 180,000 tons in 1983/84. Vegetable oil output surged an estimated 15 percent to a record in 1983/84, following a drought-induced decline in 1982/83. Despite improved domestic supplies, vegetable oil imports are forecast to remain near the 1983 level of 1.25 million tons in 1984 because of resurgent domestic demand.

Only modest gains in cereal output are projected for 1984/85 because of excellent weather and above-trend harvests in 1983/84. Rice production is projected to decline about 2.6 percent to 55.5 million tons and coarse grain output to remain unchanged at about 30.8 million tons. Wheat production is expected to maintain its strong upward trend in 1984 and is forecast at 44.5 million tons. Despite these small gains in output, India appears to have adequate domestic cereal supplies to meet average per capita consumption levels of 1980/81-1983/84 without drawing down stocks. These estimates are, however, biased downward by a year of very low per capita availability associated with the 1982/83 drought. Also, the status quo estimates provide for a level of per capita consumption only 92 percent of the FAO recommended minimum diet.



The nutrition-based calculation puts 1984/85 cereal import needs at nearly 6 million tons. The food security stock increment estimate for 1984/85 suggests that stocks should be drawn down by 623,000 tons. This estimate is biased by the below-target stocks that existed during most of the base period and is probably unrealistic because stocks are now near a level the Government considers adequate for food security purposes. Trend projections for 1985/86 call for a 3.5-percent increase in cereal production, leading to a larger cereal surplus of 6.4 million tons using the status quo approach, and a smaller 4.6-million-ton deficit in the nutrition-based calculation.

The 1984 pulse harvest is forecast to rise 3.7 percent to 12 million tons based on good weather during the current growing season and favorable producer prices. On a status quo basis, India is to have an estimated pulse surplus of 784,000 tons, but this is biased by a year of very low per capita availability following the 1979/80 drought, as well as the persistent downward trend in pulse availabilities. The status quo estimates support a level of pulse consumption that is only 74 percent of what is needed to achieve the FAO recommended minimum diet. The nutrition-based calculation indicates pulse import needs of 2.9 million tons in both 1984/85 and 1985/86. Because of the importance of pulses as a protein source in Indian diets, the gap in pulse availabilities must be filled by imports of pulses and other protein-rich foods, rather than cereals.

Following a year of exceptional weather and record production in 1983/84, vegetable oil output is projected to decline about 3 percent to 3.45 million tons in 1984/85. Status quo calculations yield import requirements of about 1.1 million tons in 1984/85, and appear to be more realistic than the lower nutrition-based estimates. The nutrition-based calculation is likely an underestimate because the base period used (1975-77) predates the gains in per capita edible oil use that have been met by rising imports since 1977. In 1985/86, vegetable oil production is projected at about 3.6 million tons, yielding status quo import requirements of about 1 million tons.

India's balance of payments situation has improved due to a decline in the volume and unit value of petroleum imports, some gains in exports, and increases in remittances from Indians living abroad. Because trade and current account deficits have been reduced to more manageable levels, the Government recently announced that it will forego \$1.1 billion in scheduled 1984 drawings from an IMF Extended Fund Facility.

Assuming that recent gains in import substitution and exports will continue, India's capacity to import food commercially will improve during 1984/85 and 1985/86. However, the projected increases in debt service obligations, both to the IMF and to commercial lenders as concessional capital becomes more scarce, leave India's balance of payments position somewhat fragile. Current projections suggest that India's commercial import capacity is sufficient to cover all status quo-based import needs in both 1984/85 and 1985/86. The nutrition-based method yields

food aid need estimates of 5.4 million tons of cereals and 2.8 million tons of pulses in 1984/85 and 3.4 million tons of cereals and 2.8 million tons of pulses in 1985/86.

## Nepal

Nepal's food situation differs significantly between its two major regions: the Tarai (plains) and the Hills. The Tarai is a traditional food surplus area, while the hill regions are chronic food deficit areas. Distribution of food in the hill regions is hindered by the mountainous terrain and the limited food purchasing power of hill inhabitants. Nepal's historical position as a small net exporter of rice stems primarily from the difficulties in moving surplus production into the hill regions as opposed to exporting it to neighboring India.

Nepal's per capita production of food grains appears to have been trending steadily downward in recent years. Poor weather was a problem in both 1982/83 and 1983/84. In 1983/84, food grain output is estimated at 2.8 million tons, up 2.5 percent from a year earlier, but below the 1981/82 record and not significantly higher than production in the late 1970's. Assuming normal weather, food grain production is projected at 2.9 million tons in 1984/85 and 3.1 million in 1985/86.

Status quo import requirement estimates for 1983/84 indicate that Nepal will approach self-sufficiency in cereals. However, the estimates are biased downward by the declining levels of per capita production in recent years. The status quo estimates support per capita cereal consumption at only 76 percent of the minimum diet recommended by FAO. Nutrition-based import needs are estimated at 814,000 tons of cereals in 1984/85. For 1985/86, status quo estimates suggest a food grain surplus, while the nutrition-based calculations indicate import needs of 689,000 tons. Nutritional needs are the greatest in the hill regions where it is difficult to meet these needs even with donated foods. While the nutrition-based import requirement estimates are too large to be absorbed by the Nepalese economy's limited transport and distribution infrastructure, they suggest a large and serious nutritional gap.

Nepal is one of the poorest countries in the world and its ability to buy food commodities, even on concessional terms, is probably negligible. Nepal's export earnings are primarily in the form of nonconvertible Indian rupees, and virtually all food imports from countries other than India must be donated.

## Pakistan

Pakistan harvested record cereal crops in each of the last 5 years and is beginning to export small quantities of wheat along with its traditional large exports of rice. While poor weather has led to an unusual setback in wheat production, food grain production is expected to be sufficient to support all status quo and most nutrition-based import needs and still leave surpluses of both rice and wheat for export in 1984/85 and 1985/86. Pakistan has been a major exporter of rice, primarily high-quality Basmati rice. Production of pulses, a key protein



source in the diet, has picked up in recent years, with 1983/84 output estimated at a record 739,000 tons. If production of this magnitude is sustained, as is currently projected, import requirements will be negligible in 1984/85 and 1985/86 using both the status quo and the nutrition-based methods of estimation.

Pakistan has become a major importer of edible oils in recent years. Vegetable oil production, which is primarily dependent on cotton production, is expected to meet only 42 percent of the country's status quo requirements in 1984/85 and 1985/86. To maintain status quo per capita intake during the next two years would require annual vegetable oil imports of about 488,000 tons. Nutrition-based estimates of Pakistan's edible oil import requirements are sharply lower. However, the estimates are based on 1975-77 average dietary shares, and therefore do not reflect the fact that in recent years, the population's edible oil intake has increased sharply due to large scale imports.

Even though Pakistan's export earnings will increase slightly in the next 2 years, imports and debt service will likely increase more rapidly, raising the trade and current account deficits. However, despite little improvement in Pakistan's ability to import food commercially, estimates suggest that foreign exchange availabilities are sufficient to cover all status quo and nutrition-based import needs. But, Pakistan is likely to continue to require food aid in the form of wheat and other foods to help feed the estimated 3 million Afghan refugees currently residing in the country. Donations of wheat for the Afghan refugees from various concessional sources reached about 400,000 tons in 1983/84.

#### Sri Lanka

Despite substantial gains in rice production since 1979/80, Sri Lanka still relies on imports for 10-15 percent of its rice and 100 percent of its wheat requirements. Assuming normal weather, record or near-record rice crops are projected for 1984/85 and 1985/86. Status quo estimates indicate that about 720,000 tons of cereal imports, including about 220,000 tons of rice and 500,000 tons of wheat, will be needed in 1984/85 to maintain per capita consumption at the 1980/81-1983/84 average. However, the status quo estimates would support per capita cereal consumption at only 83 percent of what is needed to achieve the FAO recommended minimum diet. Nutrition-based estimates call for nearly 1.2 million tons of cereal imports in 1984/85. Barring larger-than-expected rice production in 1985/86, both status quo and nutrition-based import requirements will remain about the same in 1985/86.

During 1983, Sri Lanka's trade deficit remained near its 1982 level due to a substantial increase in tea export prices and a slight decline in imports. However, earnings from primarily farm-based exports are not likely to rise dramatically in 1984 and 1985, and the Government will attempt to sustain imports of needed food and capital goods. Rising debt service obligations will constrain the availability of foreign exchange to finance merchandise imports. Sri Lanka's capacity to import food commercially is estimated to be only about \$100 million in both

1984/85 and 1985/86. As a result, food aid needs in 1984/85 are estimated at about 220,000 tons of cereals using the status quo approach, and 690,000 tons using the nutrition-based approach. Status quo and nutrition-based aid needs for 1985/86 are estimated at 150,000 tons and 630,000 tons, respectively.

Table 40.--South Asia basic food data

Country/commodity	:Actual or:		: Use		: Actual :		: Per :		Commodities covered and share of daily per capita caloric intake	
	:Actual or	:targeted :	: Net	:	:	: or	:Actual or	: capita		
	:forecast	:beginning:	:imports:	:Nonfeed:	: Feed	: Total	:targeted:	:forecast :		: nonfeed :
	:production:	: stocks :	:	: use :	: use :	: use :	: ending :	:population:	: use :	
	:	:	:	:	:	:	: stocks :	:	:	
	-----1,000 tons-----					Thousands	Kilos	Commodity	Percent	
<b>Afghanistan</b>										
Wheat									Wheat 53.11	
1980/81-1983/84:	2,200	0	111	2,311	0	2,311	0	13,925	166	Rice 6.97
1983/84 prel. :	2,200	0	45	2,245	0	2,245	0	13,800	163	Corn 16.72
1984/85 est. :	2,200	0	--	--	0	--	0	14,000	--	Total 76.80
1985/86 est. :	2,420	0	--	--	0	--	0	15,400	--	
Other cereals										
1980/81-1983/84:	965	0	0	965	0	965	0	13,925	69	
1983/84 prel. :	947	0	0	947	0	947	0	13,800	69	
1984/85 est. :	947	0	--	--	0	--	0	14,000	--	
1985/86 est. :	1,042	0	--	--	0	--	0	15,400	--	
<b>Bangladesh</b>										
Rice										Wheat 11.94
1980/81-1983/84:	14,135	417	206	14,440	0	14,440	318	93,050	155	Rice 72.86
1983/84 prel. :	14,810	298	300	15,108	0	15,108	300	95,900	158	Total vege-
1984/85 est. :	15,393	300	--	--	0	--	300	98,300	--	table oils 2.26
1985/86 est. :	15,793	300	--	--	0	--	300	100,800	--	Total 87.06
Wheat										
1980/81-1983/84:	1,089	348	1,402	2,454	0	2,454	384	93,050	26	
1983/84 prel. :	1,200	326	1,977	2,813	0	2,813	690	95,900	29	
1984/85 est. :	1,300	690	--	--	0	--	690	98,300	--	
1985/86 est. :	1,400	690	--	--	0	--	690	100,800	--	
Vegetable oils										
1980/81-1983/84:	68	65	142	186	0	186	88	93,050	2	
1983/84 prel. :	73	113	116	190	0	190	112	95,900	2	
1984/85 est. :	75	112	--	--	0	--	112	98,300	--	
1985/86 est. :	83	112	--	--	0	--	112	100,800	--	
<b>India</b>										
Rice										Wheat 17.56
1980/81-1983/84:	52,590	5,464	-372	52,528	263	52,791	4,892	707,200	74	Rice 30.48
1983/84 prel. :	57,000	3,800	310	56,110	200	56,310	4,800	730,039	77	Corn 3.35
1984/85 est. :	55,000	4,800	--	--	278	--	4,800	745,734	--	Sorghum 6.17
1985/86 est. :	57,000	4,800	--	--	284	--	4,800	761,768	--	Millet 5.91
										Barley 1.10
										Pulses 7.84
										Total vege-
										table oils 5.85
										Total 78.25
Wheat										
1980/81-1983/84:	37,024	10,072	2,101	37,081	300	37,381	11,817	707,200	52	
1983/84 prel. :	42,502	13,584	2,500	42,486	300	42,786	15,800	730,039	58	
1984/85 est. :	44,500	15,800	--	--	317	--	15,800	745,734	--	
1985/86 est. :	46,500	15,800	--	--	323	--	15,800	761,768	--	
Other cereals										
1980/81-1983/84:	29,632	1,587	-6	27,819	1,820	29,639	1,575	707,200	39	
1983/84 prel. :	30,862	1,300	0	28,792	1,870	30,662	1,500	730,039	39	
1984/85 est. :	30,800	1,500	--	--	1,919	--	1,500	745,734	--	
1985/86 est. :	31,900	1,500	--	--	1,916	--	1,500	761,768	--	
Pulses										
1980/81-1983/84:	10,569	0	89	10,520	138	10,658	0	707,200	15	
1983/84 prel. :	11,569	0	180	11,649	100	11,749	0	730,039	16	
1984/85 est. :	12,000	0	--	--	145	--	0	745,734	--	
1985/86 est. :	12,300	0	--	--	149	--	0	761,768	--	
Vegetable oils										
1980/81-1983/84:	3,172	170	1,138	4,307	0	4,307	173	707,200	6	
1983/84 prel. :	3,555	170	1,100	4,655	0	4,655	170	730,039	6	
1984/85 est. :	3,450	170	--	--	0	--	170	745,734	--	
1985/86 est. :	3,600	170	--	--	0	--	170	761,768	--	

--Continued

Table 40.--South Asia basic food data--continued

Country/commodity	:Actual or:		Net	:Use		:Actual:		Per	Commodities covered			
	:Actual or:	:targeted:		Nonfeed	Feed	Total	:or:			:Actual or:	capita	and share of daily
	forecast	beginning										
	:production:	:stocks	:	:use	:use	:use	:stocks	:	caloric intake			
	-----1,000 Tons-----						Thousands	Kilos	Commodity	Percent		
Nepal									Wheat	8.97		
Rice									Rice	51.41		
1980/81-1983/84:	1,421	0	-28	1,394	0	1,394	0	15,911	88	Corn	20.06	
1983/84 prel.:	1,465	0	-5	1,460	0	1,460	0	16,490	89	Total	80.44	
1984/85 est.:	1,500	0	--	--	0	--	0	16,888	--			
1985/86 est.:	1,650	0	--	--	0	--	0	17,259	--			
Other Cereals												
1980/81-1983/84:	1,294	0	17	1,311	0	1,311	0	15,911	82			
1983/84 prel.:	1,300	0	10	1,310	0	1,310	0	16,490	79			
1984/85 est.:	1,370	0	--	--	0	--	0	16,888	--			
1985/86 est.:	1,457	0	--	--	0	--	0	17,259	--			
Pakistan									Wheat	46.32		
Wheat									Rice	11.12		
1980/81-1983/84:	18,471	1,325	316	11,500	0	11,500	1,613	88,467	130	Corn	2.70	
1983/84 prel.:	12,414	1,684	200	12,150	0	12,150	2,148	92,414	131	Pulses	2.83	
1984/85 est.:	11,500	2,148	--	--	0	--	2,148	95,177	--	Total vege-		
1985/86 est.:	13,000	2,148	--	--	0	--	2,148	97,937	--	table oils	5.09	
										Total	68.07	
Other cereals												
1980/81-1983/84:	4,312	383	-1,113	3,032	130	3,162	420	88,467	34			
1983/84 prel.:	4,500	565	-1,300	3,235	130	3,365	400	92,414	35			
1984/85 est.:	4,550	400	--	--	140	--	400	95,177	--			
1985/86 est.:	4,650	400	--	--	145	--	400	97,937	--			
Pulses												
1980/81-1983/84:	557	0	0	524	33	557	0	88,467	6			
1983/84 prel.:	739	0	0	739	0	739	0	92,414	8			
1984/85 est.:	750	0	--	--	36	--	0	95,177	--			
1985/86 est.:	750	0	--	--	37	--	0	97,937	--			
Vegetable oils												
1980/81-1983/84:	257	72	522	782	0	782	68	88,467	9			
1983/84 prel.:	209	68	700	917	0	917	60	92,414	10			
1984/85 est.:	350	60	--	--	0	--	60	95,177	--			
1985/86 est.:	375	60	--	--	0	--	60	97,937	--			
Sri Lanka									Wheat	18.16		
Rice									Rice	42.11		
1980/81-1983/84:	1,489	127	183	1,664	0	1,664	135	15,611	107	Cassava	3.59	
1983/84 prel.:	1,571	139	157	1,665	0	1,665	202	16,056	104	Total vege-		
1984/85 est.:	1,520	202	--	--	0	--	90	16,362	--	table oils	2.67	
1985/86 est.:	1,550	202	--	--	0	--	90	16,656	--	Total	66.54	
Wheat												
1980/81-1983/84:	0	65	502	483	0	483	84	15,611	31			
1983/84 prel.:	0	100	570	550	0	550	120	16,056	34			
1984/85 est.:	0	120	--	--	0	--	120	16,362	--			
1985/86 est.:	0	120	--	--	0	--	120	16,656	--			
Roots and tubers												
1980/81-1983/84:	407	0	407	407	0	407	0	15,611	26			
1983/84 prel.:	450	0	450	450	0	450	0	16,056	28			
1984/85 est.:	460	0	--	--	0	--	0	16,362	--			
1985/86 est.:	480	0	--	--	0	--	0	16,656	--			
Vegetable oils												
1980/81-1983/84:	82	0	-20	62	0	62	0	15,611	4			
1983/84 prel.:	95	0	-30	65	0	65	0	16,056	4			
1984/85 est.:	100	0	--	--	0	--	0	16,362	--			
1985/86 est.:	110	0	--	--	0	--	0	16,656	--			

-- Not applicable.

Table 41.--South Asia food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates

[illegible]

--Continued



Table 41.--South Asia food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates--continued

Country/ commodity	Total use 1/				Import requirements				Food aid needs					
	Forecast													
	domestic				Quantity				Commercial					
	production:	quo	based	Status : Nutrit.	Status : Nutrit.	Status : Nutrit.	Status : Nutrit.	Value	import capacity	Quantity	Status : Nutrit.	Status : Nutrit.	Status : Nutrit.	Status : Nutrit.
				quo	based	quo	based	quo	based	quo	based	quo	based	based
<u>Nepal</u>														
Rice														
1984/85	1,500	1,480	2,190	-20	690	--	--	--	--	--	--	--	--	--
1985/86	1,650	1,512	2,257	-138	607	--	--	--	--	--	--	--	--	--
Other cereals														
1984/85	1,370	1,391	1,494	21	124	--	--	--	--	--	--	--	--	--
1985/86	1,457	1,422	1,539	-35	82	--	--	--	--	--	--	--	--	--
Total above														
1984/85	--	--	--	1	814	3/	206	5	1	0	809	0	205	
1985/86	--	--	--	0	689	0	169	3	1	0	686	0	168	
<u>Pakistan</u>														
Wheat														
1984/85	11,500	12,373	12,833	873	1,333	--	--	--	--	--	--	--	--	--
1985/86	13,000	12,731	13,296	-268	296	--	--	--	--	--	--	--	--	--
Other cereals														
1984/85	4,500	3,418	3,754	-1,682	-796	--	--	--	--	--	--	--	--	--
1985/86	4,650	3,518	3,868	-1,132	-782	--	--	--	--	--	--	--	--	--
Total														
1984/85	--	--	--	-209	-587	-39	-109	411	76	0	5/0	0	5/0	
1985/86	--	--	--	-1,401	-486	-252	-97	465	84	0	0	0	0	
Pulses														
1984/85	750	594	754	-156	4	-93	2	57	34	0	0	0	0	
1985/86	750	611	773	-139	23	-80	13	65	37	0	0	0	0	
Vegetable oils														
1984/85	350	838	527	488	177	381	138	336	262	6/11	0	6/8	0	
1985/86	375	863	545	488	170	324	113	434	288	7/	0	7/	0	
Total														
1984/85	--	--	--	--	--	381	249	--	372	0	--	8	0	
1985/86	--	--	--	--	--	324	126	--	409	--	--	0	0	

--Continued

Table 41.--South Asia food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates--continued

Country/ commodity	Total use 1/				Import requirements				Commercial import capacity	Food aid needs				
	Forecast	Status	Nutrit.		Quantity	Value		Quantity		Value	Status	Nutrit.	Status	Nutrit.
	production:	quo	based		Status	Nutrit.	Status	Nutrit.		Status	Nutrit.	Status	Nutrit.	
	:	:	:	:	quo	based	quo	based		quo	based	quo	based	
								1,000 tons	Million dollars			1,000 tons	Million dollars	
<u>Sri Lanka</u>														
Rice														
1984/85	1,520	1,745	1,714	225	194	--	--	--	--	--	--	--	--	
1985/86	1,550	1,776	1,745	226	196	--	--	--	--	--	--	--	--	
Wheat														
1984/85	0	506	937	506	937	--	--	--	--	--	--	--	--	
1985/86	0	515	954	515	954	--	--	--	--	--	--	--	--	
Roots and tubers														
1984/85	460	426	612	-34	152	--	--	--	--	--	--	--	--	
1985/86	480	434	626	-46	146	--	--	--	--	--	--	--	--	
Total above 2/														
1984/85	--	--	--	717	1,190	137	227	501	96	4/202	4/674	4/39	4/129	
1985/86	--	--	--	723	1,206	134	223	572	106	4/134	4/617	4/25	4/114	
Vegetable oils														
1984/85	100	65	46	-35	-54	-28	-44	3	3	0	0	0	0	
1985/86	110	67	47	-43	-63	-30	-44	5	3	0	0	0	0	
Total														
1984/85	--	--	--	--	--	137	327	--	99	--	--	39	129	
1985/86	--	--	--	--	--	134	223	--	109	--	--	25	114	
<u>South Asia, total</u>														
Cereals and roots and tubers														
1984/85	--	--	--	2,017	15,335	421	3,279	--	--	748	10,377	160	2,263	
1985/86	--	--	--	1,991	12,887	402	2,691	--	--	616	7,153	129	1,541	
Vegetable oils														
1984/85	--	--	--	1,698	1,049	1,280	792	--	--	11	0	8	0	
1985/86	--	--	--	1,643	984	1,055	633	--	--	0	0	0	0	
Pulses														
1984/85	--	--	--	0	2,905	0	1,217	--	--	0	2,810	0	1,177	
1985/86	--	--	--	0	2,959	0	1,199	--	--	0	2,823	0	1,145	
Total														
1984/85	--	--	--	--	--	1,703	5,175	--	--	--	--	187	3,809	

1/ The sum of targeted nonfeed and feed use.

2/ Cereal equivalent.

3/ Less than 0.5.

4/ Surplus vegetable oil import capacity partially offsets cereal aid needs.

5/ Surplus pulse and vegetable oil import capacities offset cereal aid needs.

6/ Surplus cereal and pulse import capacity partially offsets vegetable oil aid needs.

7/ Surplus cereal and pulse import capacities offset vegetable oil aid needs.

— Not applicable.

Table 42.--Summary of South Asia cereal import requirements  
and food aid needs to support consumption

Country	1984/85		1984/85	
	1983/84	Import requirements:	Aid needs	
	Imports	Status : Nutrit.	Status : Nutrit.	
		quo : based	quo : based	
	-----1,000 tons-----			
Afghanistan	45	150	189	20 59
Bangladesh	2,277	1,149	5,727	526 5,130
India	2,680	0	6,828	0 3,705
Nepal	5	1	814	0 809
Pakistan	0	0	587	0 0
Sri Lanka	727	717	1,190	202 674
South Asia, total	5,734	2,017	15,335	748 10,377

Table 43.--South Asia financial indicators, actual and projected

Country and year	: Inter- national reserves :(on 12/31):	: Exports (fob)	: Imports (fob)	: Debt service due	: 1983 and 1984 conditions as of April 1984
: Million dollars					
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Table 44.--South Asia import requirements and aid needs to support cereal stock adjustments 1/

Country	Estimated stock		Import requirements				Aid needs			
	increment		Quantity		Value		Quantity		Value	
	Quantity	Value	Status	Nutrit.	Status	Nutrit.	Status	Nutrit.	Status	Nutrit.
	:	:	quo	based	quo	based	quo	based	quo	based
	1,000 tons	Million dollars	1,000 tons		Million dollars		1,000 tons		Million dollars	
<u>Bangladesh</u>										
Cereals										
1984/85	-4	-1	1,145	5,724	255	1,277	522	5,126	116	1,144
1985/86	25	5	1,128	5,833	243	1,261	486	5,215	105	1,127
Total										
1984/85	--	-1	--	--	360	1,388	--	--	116	1,145
1985/86	--	5	--	--	331	1,354	--	--	105	1,127
<u>India</u>										
Cereals										
1984/85	-623	-129	-4,113	6,205	-857	1,295	0	3,082	0	644
1985/86	461	93	-5,413	5,444	-1,094	1,100	-	1,064	0	215
Total										
1984/85	--	-129	--	--	665	3,053	--	--	0	1,821
1985/86	--	93	--	--	-353	2,713	--	--	0	1,360
<u>Pakistan</u>										
Cereals										
1984/85	63	12	-146	649	-27	121	0	0	8	0
1985/86	131	23	-1,270	-355	-229	-64	0	0	0	0
Total										
1984/85	--	12	--	--	393	261	--	--	0	0
1985/86	--	23	--	--	347	149	--	--	0	0
<u>Sri Lanka</u>										
Cereals										
1984/85	13	3	730	1,203	140	230	215	687	42	132
1985/86	4	1	727	1,210	135	224	138	621	26	120
Total										
1984/85	--	3	--	--	140	330	--	--	42	132
1985/86	--	1	--	--	135	224	--	--	--	115

1/ Includes only countries for which cereal stock data are available.

-- Not applicable.

SOUTHEAST ASIA  
SUBREGION

The performance of Southeast Asia's farm sector was mixed in 1983/84. Production of rice, the region's primary food staple, held steady at near the 1982/83 record as declines induced by poor weather in the Philippines, Laos, and Kampuchea offset small gains in Indonesia and Vietnam. However, significant gains in the production of corn, roots, and tubers contributed to a 3.7 percent increase in the overall production of cereals and cereal equivalents in the subregion. Indonesia and Vietnam recorded gains in total production, while the Philippines, Kampuchea, and Laos registered declines. In the Philippines, production declines coincided with a sharp deterioration in the financial capacity to import food, and food security stocks fell dramatically.

Assuming a return to more normal weather, total rice production is forecast to rise about 3.5 percent throughout the subregion in 1984/85. Production of cereals, and roots and tubers is forecast to rise by about 3.3 percent. Status quo import requirements are estimated at 3 million tons in 1984/85, with the Philippines accounting for the bulk. In addition to 1.9 million tons of cereal imports to support status quo consumption in the Philippines, about 300,000 tons of cereal are needed to help rebuild depleted stocks. Nutrition-based estimates call for 3.7 million tons of cereal imports in the subregion in 1984/85, with the most severe deficits in the Philippines and Vietnam.

The balance of payments position of most of the subregion's economies remained relatively weak in 1983/84. The Philippines' capacity to commercially import food was eroded badly by a burdensome trade deficit, unmanageable debt obligations, and a precipitous drop in foreign exchange reserves--problems which are likely continue during 1984/85. While little is known about financial conditions in Vietnam, Laos, and Kampuchea, the limited export base of these countries will probably continue to constrain their ability to finance imports. Indonesia's large trade surplus has declined considerably, and debt obligations have risen--because of stagnating petroleum export earnings--but reserves remain ample to finance any needed food imports. The status quo calculations indicate that the subregion's food aid needs will be about 1.6 million tons in 1984/85, with the Philippines accounting for 1.4 million tons. Nutrition-based aid needs, primarily in the Philippines and Vietnam, are estimated at 2.5 million tons.

Assuming trend production, 1985/86 import requirements are projected to fall to about 2.6 million tons using the status quo approach, and increase marginally to about 3.8 million tons using the nutrition-based approach. The subregion's total food aid needs are projected to remain near the 1984/85 level, with the Philippines and Vietnam requiring the bulk.

Indonesia

Although Indonesia's 1983/84 rice crop increased only 1.2 percent because of a late arriving monsoon, production of secondary food crops, including corn and cassava, rebounded from 1982/83's drought-curtailed output. In grain equivalent terms, production



rose 6.3 percent, but yearending stocks declined 16 percent as domestic demand jumped 8.4 percent. Imports of wheat, 1.71 million tons, and rice, 1.18 million tons, constituted 10 percent of grain equivalent nonfood use in 1983/84. Grain use per person, at 180 kilograms, continued to rise, up from 145 kilograms as recently as 1977/78.

Grain equivalent food production is projected 4.4 percent higher in 1984/85, based on a highly favorable monsoon season and further success in extending high yielding technology. Average per capita food grain consumption during 1980/81-1983/84 was well above the FAO recommended minimum. No imports are required to achieve the FAO recommended minimum diet in either 1984/85 or 1985/86. Total cereal import requirements to maintain status quo levels are projected at 449,000 tons in 1984/85, far below the 2.3 million tons of actual imports in 1983/84. This large decline is due mainly to increased rice and corn production. Import needs for stock building are estimated at 322,000 tons. International reserves of \$3.7 billion provide ample commercial import capacity to cover all of Indonesia's estimated food import requirements without aid. Assuming continued gains in rice and corn production, Indonesia should require no cereal imports or food aid in 1985/86.

#### Kampuchea

Information on the food situation in Kampuchea is very limited. However, recent upward revisions in the estimated 1982/83 and 1983/84 rice harvest suggest a substantial improvement in Kampuchea's food supply. The 1982/83 rice crop is estimated at 1.26 million tons, up nearly 29 percent from the previous year, and the 1983/84 crop is estimated near this level. With improved production, Kampuchea's annual rice imports fell from an average of nearly 150,000 tons during 1978/79-1981/82, to about 50,000 tons in 1982/83 and 1983/84. Imports of wheat, which is not grown in Kampuchea, are estimated at about 35,000 tons in both 1982/83 and 1983/84.

Kampuchea's rice crop is projected to fall to about 1.1 million tons in 1984/85, and then rise to about 1.2 million tons in 1985/86. Corn production is expected to remain stable at about 100,000 tons in both years.

To maintain 1980/81-1983/84 average per capita consumption, cereal import requirements are estimated at 198,000 tons for 1984/85 and 121,000 tons for 1985/86. Nutrition-based import requirements may be significantly lower at 104,000 tons in 1984/85 and 37,000 in 1985/86. Imports at the status quo calculation would support average per capita consumption above the FAO recommended minimum. Although financial data on Kampuchea are not available, the country's commercial food import capacity is probably negligible. Virtually all food imports would have to be provided on a concessional basis.

#### Laos

Information is scarce on the food situation in Laos. Limited commercial import capacity and internal transportation difficulties limit the ability to substitute imports for shortfalls

in rice production. Rice production in 1983/84 declined about 8 percent from 1982/83, mostly because of smaller harvested area. However, production is projected to rebound to about 700,000 tons in 1984/85 and 800,000 in 1985/86.

To maintain 1980/81-1983/84 average per capita consumption, cereal import requirements are estimated at 59,000 tons in 1984/85, while nutrition-based import needs are estimated slightly higher at 77,000 tons. Commercial import capacity probably is sufficient to cover both status quo and nutrition-based needs. Assuming rice production as expected, both import and food aid needs are projected to be negligible in 1985/86.

#### Philippines

In 1983/84, cereal production fell for the second consecutive year because of unreplenished irrigation systems, expensive credit, and price-induced cutbacks in fertilizer and pesticide use. Rice production was 7 percent below the record 1981/82 harvest, although corn output recovered to the 1980/81-1983/84 average. Distribution of Government stocks to drought-affected areas helped sustain per capita consumption, but corn and wheat stocks, which had been built up through imports in 1982/83, fell sharply by the end of 1983/84. Output of rootcrops was above the drought-reduced 1982/83 level, but below the 1980/81-1983/84 average. The effects of the drought are expected to curtail coconut oil production until mid-1984. Per capita consumption of cereals declined during 1983/84 as the Philippines' ongoing financial crisis seriously impaired its ability to import food. Efforts to maximize foreign exchange earnings from coconut oil exports apparently reduced already low vegetable oil intake by more than 40 percent.

The 1984/85 corn and rice crops are expected to benefit from normal monsoon rains and greater availability of inputs, but production is not projected to keep pace with domestic requirements. Despite the extension of agricultural loans from various multilateral and bilateral sources, expensive credit and higher input costs will inhibit significant strides in production. To arrest a downturn in per capita consumption from the 1980/81-1983/84 average, imports of 1.9 million tons will be needed. This import need is estimated at 60 percent above 1980/81-1983/84 base period imports. Nutrition-based import needs are estimated to be slightly higher at 2.2 million tons in 1984/85. In addition, Government stocks are quite low and more than 300,000 tons of additional cereal imports will be required to help rebuild stocks.

The Philippines' commercial food import capacity deteriorated during 1983 as the balance of payments deficit widened to an unsustainable level. Declining foreign reserves, accelerated capital outflows, and a sharp increase in debt service necessitated import restrictions. Without debt rescheduling and new funds from commercial and official sources, food aid will be needed to finance 1.4 million tons of status quo cereal import needs, 1.7 million tons of nutrition-based import needs, and over 300,000 tons of additional cereal stocks.

With good weather and adequate incentives, the Philippines could improve 1985/86 grain yields. However, 1985/86 import requirements are projected to rise further to 2.1 million tons using the status quo approach, and 2.3 million tons using the nutrition-based approach. Food aid needs for 1985/86 are projected at 1.5 to 1.8 million tons.

#### Vietnam

Vietnam's 1983/84 rice crop is estimated at 9.1 million tons, up 2 percent from 1982/83 and the third straight record harvest. Average net rice imports declined from about 170,000 tons a year during 1977/78-1980/81 to about 10,000 tons during 1981/82-1983/84. Corn production rose more modestly and imports remained stable at an estimated 100,000 tons per year. Vietnam continues to import substantial quantities of wheat, which is not produced domestically, but annual wheat imports declined from an average of about 1.1 million tons during 1977/78-1980/81 to under 600,000 tons during 1981/82-1983/84.

Rice production is projected at 9.1 million tons in 1984/85 and 9.2 million in 1985/86, based on normal weather. Continued modest gains are projected in corn output. Status quo estimates of total cereal import requirements for 1984/85 are 316,000 tons, substantially below actual imports of about 755,000 tons in 1983/84. However, the status quo calculations support per capita consumption at only 91 percent of the FAO recommended minimum. The nutrition-based estimates show sharply higher import needs of about 1.3 million tons in 1984/85. In 1985/86, import needs are projected to rise to 444,000 tons using the status quo approach and 1.45 million tons using the nutrition-based approach, although further breakthroughs in rice production could reduce these estimates.

Vietnam's estimated commercial import capacity of \$72 million in 1984/85 and \$102 million in 1985/86 is sufficient to cover status quo import needs in both years. However, food aid needs using the nutrition-based calculations are estimated at about 800,000 tons of cereals in 1984/85, and 700,000 tons in 1985/86.

Table 45.--East and Southeast Asia basic food data

[illegible]

—Continued



Table 45.--East and Southeast Asia basic food data--continued

Country/commodity	: Actual or :		: Use :		: Actual :		: Per :		: Commodities covered		
	: Actual or :	: targeted :	: Net :	: :		: or :	: Actual or :	: capita :	: and share of daily		
	: forecast :	: beginning :	: imports :	: Nonfeed :	: Feed :	: Total :	: targeted :	: forecast :	: nonfeed :	: per capita	
	: production :	: stocks :	: use :	: use :	: use :	: ending :	: population :	: use :	: caloric intake		
	:	:	:	:	:	:	: stocks :	:	:	:	:
	-----1,000 tons-----						Thousands	Kilos	Commodity	Percent	
Philippines											
Rice										Rice	39.76
1980/81-1983/84:	5,060	1,441	-56	4,824	357	5,182	1,263	50,947	95	Corn	12.51
1983/84 prel. :	4,875	1,300	-29	4,848	390	5,238	908	52,847	92	Wheat	5.22
1984/85 est. :	5,070	908	--	--	380	--	908	54,221	--	Cassava	3.41
1985/86 est. :	5,200	908	--	--	390	--	908	55,631	--	Coconut oil	4.40
										Sweet potatoes	2.64
										Total	67.94
Other cereals											
1980/81-1983/84:	3,215	283	1,241	2,685	1,797	4,482	257	50,947	53		
1983/84 prel. :	3,280	267	1,100	2,606	1,883	4,489	158	52,847	49		
1984/85 est. :	3,380	158	--	--	1,912	--	158	54,221	--		
1985/86 est. :	3,400	158	--	--	1,961	--	158	55,631	--		
Roots and tubers											
1980/81-1983/84:	3,164	0	0	3,164	0	3,164	0	50,947	62		
1983/84 prel. :	3,040	0	0	3,040	0	3,040	0	52,847	58		
1984/85 est. :	3,119	0	--	--	0	--	0	54,221	--		
1985/86 est. :	3,200	0	--	--	0	--	0	55,631	--		
Vegetable oils											
1980/81-1983/84:	1,126	90	-957	68	122	189	70	50,947	1		
1983/84 prel. :	1,080	70	-1,019	45	76	121	10	52,847	1		
1984/85 est. :	1,000	10	--	--	130	--	10	54,221	--		
1985/86 est. :	1,100	10	--	--	133	--	10	55,631	--		
Vietnam											
Rice										Wheat	5.45
1980/81-1983/84:	8,455	0	111	8,582	0	8,582	0	55,744	153	Rice	67.48
1983/84 prel. :	9,100	0	75	9,155	0	9,155	0	57,784	158	Corn	3.29
1984/85 est. :	9,100	0	--	--	0	--	0	57,082	--	Total	76.22
1985/86 est. :	9,200	0	--	--	0	--	0	58,452	--		
Other cereals											
1980/81-1983/84:	466	0	703	1,170	0	1,170	0	55,744	21		
1983/84 prel. :	500	0	700	1,200	0	1,200	0	57,784	21		
1984/85 est. :	510	0	--	--	0	--	0	57,082	--		
1985/86 est. :	520	0	--	--	0	--	0	58,452	--		

-- Not applicable.



Table 46.--East and Southeast Asia food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates

Country/ commodity	: Total use 1/ :		: Import requirements :						: Food aid needs					
	: Forecast :	:		:				: Commercial :	:		:			
	: domestic :	: Status :	: Nutrit. :	: Quantity :	: Value :	: Status :	: Nutrit. :	: Status :	: Nutrit. :	: Quantity :	: Value :			
	: production: quo :	: based :	: Status :	: Nutrit. :	: Status :	: Nutrit. :	: Status :	: Nutrit. :	: Status :	: Nutrit. :	: Status :	: Nutrit. :		
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Table 46.--East and Southeast Asia food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates--continued

Country/ commodity	Total use 1/					Import requirements				Food aid needs					
	Forecast	Status	Nutrit.	Quantity	Value	Commercial	import	capacity	Quantity	Value	Status	Nutrit.	Status	Nutrit.	
	production	quo	based	Status	Nutrit.	Status	Nutrit.	Status	Nutrit.	Status	Nutrit.	Status	Nutrit.	Status	Nutrit.
	:	:	:	quo	based	quo	based	quo	based	quo	based	quo	based	quo	based
								1,000 tons	Million dollars			1,000 tons	Million dollars		
<u>Philippines</u>															
Rice															
1984/85	5,070	5,517	5,609	447	539	--	--	--	--	--	--	--	--	--	--
1985/86	5,200	5,660	5,755	460	555	--	--	--	--	--	--	--	--	--	--
Other cereals															
1984/85	3,380	4,771	5,153	1,391	1,773	--	--	--	--	--	--	--	--	--	--
1985/86	3,400	4,895	5,281	1,495	1,881	--	--	--	--	--	--	--	--	--	--
Roots and tubers															
1984/85	3,119	3,374	2,876	255	-243	--	--	--	--	--	--	--	--	--	--
1985/86	3,200	3,462	2,950	262	-250	--	--	--	--	--	--	--	--	--	--
Total above 2/															
1984/85	--	--	--	1,931	2,221	374	430	528	102	1,377	1,667	267	323		
1985/86	--	--	--	2,051	2,344	385	440	547	103	1,477	1,771	277	332		
Vegetable oils															
1984/85	1,000	202	--	-798	-599	-707	-531	6	5	0	0	0	0		
1985/86	1,110	207	--	-893	-686	-673	-517	7	5	0	0	0	0		
Total															
1984/85	--	--	--	--	--	374	430	--	107	--	--	266	322		
1985/86	--	--	--	--	--	385	440	--	108	--	--	277	332		
<u>Vietnam</u>															
Rice															
1984/85	9,100	8,728	9,505	-372	405	--	--	--	--	--	--	--	--	--	--
1985/86	9,200	8,937	9,718	-263	518	--	--	--	--	--	--	--	--	--	--
Other cereals															
1984/85	510	1,198	--	688	909	--	--	--	--	--	--	--	--	--	--
1985/86	520	1,227	--	707	933	--	--	--	--	--	--	--	--	--	--
Total															
1984/85	--	--	--	316	1,314	44	184	513	72	0	801	0	112		
1985/86	--	--	--	444	1,452	60	197	751	102	0	701	0	95		

--Continued

Table 46.--East and Southeast Asia food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates--continued

[illegible]

1/ The sum of targeted nonfeed and feed use.

2/ Cereal equivalent.

-- Not applicable.

Table 47.--Summary of East and Southeast Asia cereal import requirements and food aid needs to support consumption

Country	:	:	1984/85	:	1984/85	
	:	1983/84	Import requirements:	:	Aid needs	
	:	Imports	Status	Nutrit.	Status	Nutrit.
	:	:	quo	based	quo	based
	:	-----1,000 tons-----				
	:					
	:					
Indonesia	:	2,939	448	0	0	0
	:					
Laos	:	50	59	76	0	0
	:					
Kampuchea	:	85	198	104	185	92
	:					
Philippines	:	1,071	1,931	2,221	1,377	1,667
	:					
Vietnam	:	775	316	1,314	0	801
	:					
East and Southeast Asia, total	:	4,920	2,952	3,715	1,562	2,560
	:					

Table 48.--Southeast Asia financial indicators, actual and projected

Country and year	: Inter- : national : : reserves : : (on 12/31):	: Exports : (fob) :	: Imports : (fob) :	: Debt : service : : due :	: 1983 and 1984 conditions : as of April 1984
<hr/>					
	: <u>Million dollars</u>				
<u>Indonesia</u>	:	:	:	:	
1980-83	: 4317	: 21215.5	: 16502.5	: 2199	Indonesia continued to realize a trade surplus in 1983
1982 prel.	: 3718	: 20000	: 18480	: 2738	although petroleum export earnings, which account for
1984 est.	: 4100	: 21500	: 19500	: 3181	60-70 percent of total exports, declined by 14 percent.
1985 est.	: 4500	: 23500	: 21000	: 3488	International reserves totaled \$3.7 billion at the end
	:	:	:	:	of 1983, up 18 percent. Overall export earnings may
	:	:	:	:	increase in 1984 and foreign debt, which increased in
	:	:	:	:	1983, is expected to remain manageable.
<u>Laos</u>	:	:	:	:	
1980-83	: 14	: 36.5	: 119.5	: 3.25	A very limited export base is expected to lead to
1982 prel.	: 16	: 44	: 115	: 3	larger trade deficits in 1984 and 1985. Foreign
1984 est.	: 18	: 48	: 137	: 3	reserve levels are expected to remain minimal.
1985 est.	: 18	: 57	: 155	: 4	
<u>Kampuchea</u>	:	:	:	:	
1980-83	: 0	: 0	: 0	: 0	There is no information on trade, foreign reserves, or
1982 prel.	: 0	: 0	: 0	: 0	debt service for Kampuchea. Most statistical informa-
1984 est.	: 0	: 0	: 0	: 0	tion about Kampuchea became unavailable after 1983.
1985 est.	: 0	: 0	: 0	: 0	
<u>Philippines</u>	:	:	:	:	
1980-83	: 1887.7	: 5333	: 7584.7	: 1937.2	Exports fell for the fourth consecutive year in 1983
1982 prel.	: 786	: 4800	: 7000	: 2480	as a result of a 40-percent currency devaluation and
1984 est.	: 865	: 5040	: 7000	: 2450	drought-reduced supplies of export crops. The trade
1985 est.	: 950	: 5292	: 7350	: 2695	deficit was reduced, however, as import financing was
	:	:	:	:	suspended late in the year and the import bill dropped
	:	:	:	:	9 percent. The balance of payments position will re-
	:	:	:	:	main well below historical levels. Import restrictions
	:	:	:	:	will likely continue to hamper economic growth.
	:	:	:	:	Negotiations with the IMF and creditor banks continue
	:	:	:	:	in an attempt to relieve the heavy debt service schedule
	:	:	:	:	and develop other measures to lessen balance of payments
	:	:	:	:	pressures.
<u>Vietnam</u>	:	:	:	:	
1980-83	: 65.5	: 343.7	: 997	: 235.5	A continuation of high trade deficits appears likely.
1982 prel.	: 40	: 275	: 855	: 232	Debt service payments will probably remain at the
1984 est.	: 40	: 302	: 1020	: 180	1980-1983 average level, and reserves are expected
1985 est.	: 40	: 355	: 1225	: 180	to remain low.

Table 49.--East and Southeast Asia import requirements and aid needs to support consumption and cereal stock adjustments <sup>1/</sup>

Country	Estimated stock				Import requirements				Aid needs			
	: Quantity		: Value		: Quantity		: Value		: Quantity		: Value	
	: Status quo	: based	: Status quo	: based	: Status quo	: based	: Status quo	: based	: Status quo	: based	: Status quo	: based
	1,000 tons	Million dollars	1,000 tons	Million dollars	1,000 tons	Million dollars	1,000 tons	Million dollars	1,000 tons	Million dollars	1,000 tons	Million dollars
<u>Indonesia</u>												
Cereals												
1984/85	322	58	770	-3,369	138	-605	0	0	0	0	0	0
1985/86	289	50	-429	-4,582	-75	-798	0	0	0	0	0	0
Total												
1984/85	--	58	--	--	0	0	--	--	0	0	0	0
1985/86	--	50	--	--	0	0	--	--	0	0	0	0
<u>Philippines</u>												
Cereals												
1984/85	328	64	2,259	2,549	438	494	1,706	1,995	330	315	386	370
1985/86	204	38	2,255	2,548	423	478	1,683	1,995	315	370	386	370
Total												
1984/85	--	--	--	--	438	494	--	--	330	315	386	370
1985/86	--	--	--	--	423	478	--	--	315	370	386	370

<sup>1/</sup> Includes only countries for which cereal stock data are available.

-- Not applicable.



Latin America

Food availability continued to deteriorate in several low-income developing countries in Latin America in 1983/84, and only some improvement is expected in 1984/85. Availabilities also appeared to deteriorate more in the Andean than in Central American or Caribbean countries.

CARIBBEAN  
SUBREGION

Harvests of basic food crops in 1983/84 were generally equal to or slightly better than a year earlier, despite localized droughts and torrential rains that are common in this region. The subregion escaped any massive natural disasters such as the hurricanes of 1979 and 1980. Nevertheless, reasonably good harvests of basic food crops on several islands, failed to reverse a chronic dependence on imported grains, oilseeds, and other products. Cereal imports continue to account for 50 to 60 percent of cereal consumption in the region. Supplies of livestock products remained particularly tight in Haiti and the Dominican Republic as the restocking stage of the African swine fever eradication program continued. The Caribbean dependence on imports of temperate zone food products continued strong during the year, despite attempts to increase domestic production by raising prices and restricting imports. The primary food imports are wheat, corn, cooking oil and dairy products. None of the countries produce wheat, although it is a primary food in the Caribbean. Rice, corn and beans are also consumed in significant quantities.

Dominican  
Republic

The food situation changed very little in the Dominican Republic in 1983/84. Agricultural output was up slightly, but total merchandise imports were down due to foreign exchange shortages and efforts to curtail growing balance of payments deficits. Export earnings, particularly from sugar, were up slightly as foreign markets stabilized and prices improved temporarily. The country's demand for food aid continued to grow steadily as its external financial situation deteriorated and production continued to lag population increases. Temporary measures to reduce imports lowered stocks of all grains (except rice) to dangerously low levels in March and April 1984. The Dominican Republic's food aid needs are estimated at \$4 million in grain to meet the status quo requirement, plus another \$10 million to meet FAO's nutrition standards.

Haiti

Although food production improved slightly in 1982/83, the overall situation deteriorated in 1983/1984, as production failed to keep pace with population growth. Prospects are not good for significant improvements in 1984/85 and 1985/86. Deteriorating financial and trade conditions in recent years have aggravated the problem. Haiti's current food situation suggests that only 60-65 percent of status quo import needs can be met through commercial markets.

Haiti needs about \$22 million of food aid to meet status quo requirements. The country has not been able to expand its production and export base in recent years, which has created a serious foreign exchange problem, and prevented it from meeting

either status quo or nutrition based needs. An additional \$100 million in food aid is needed annually to meet FAO nutrition standards.

#### Jamaica

Basic food production improved only slightly in 1983/1984, following a sharp drop in 1981/82 and only modest gains in 1982/83. Shortages of key inputs, such as fertilizer and pesticides, continue to depress output. The current easing of food import restrictions is also reducing production incentives. Jamaica's food import needs are expected to expand for another year or two and will likely exceed 440,000 metric tons of grain equivalent in 1984/85 just to maintain status quo per capita consumption.

Jamaica's financial situation improved little in 1983. Export earnings remained depressed because of soft world markets for bauxite and sugar. Meanwhile, imports of food and nonfood items continued to rise. Only refinancing of the public debt and continuing flows of foreign credit have kept the economy afloat. In 1984/85, Jamaica probably will be able to purchase only 50 percent of its cereal import requirements without financial assistance. Furthermore, the economy is not expected to improve significantly before 1985 or 1986, despite an apparent building boom.

Table 50.--Caribbean basic food data

Country/commodity	:Actual or:		: Use		: Actual :		: Per :		: Commodities covered	
	:Actual or	:targeted :	: Net :	:	:	: or :	:Actual or :	: capita :	: and share of daily	:
	forecast	beginning	imports	Nonfeed	Feed	Total	targeted	forecast	nonfeed	per capita
	:production:	stocks :	:	: use :	: use :	: use :	: ending :	:population:	: use :	: caloric intake
	:	:	:	:	:	:	: stocks :	:	:	:
	-----1,000 tons-----						Thousands	Kilos	Commodity	Percent
<u>Dominican</u>										
<u>Republic</u>										
Wheat 10.62										
Rice 19.98										
Corn .00										
Dry beans 2.83										
Cassava 3.75										
Plantains 9.06										
Bananas 4.00										
Milk 4.92										
Total 55.17										
Roots and tubers :										
1980/81-1983/84:	1,084	0	4	1,088	0	1,088	0	5,912	184	
1983/84 prel. :	1,100	0	3	1,103	0	1,103	0	6,133	180	
1984/85 est. :	1,120	0	--	--	0	--	0	6,206	--	
1985/86 est. :	1,140	0	--	--	0	--	0	6,443	--	
Pulses										
1980/81-1983/84:	43	0	0	43	0	43	0	5,912	7	
1983/84 prel. :	47	0	0	47	0	47	0	6,133	8	
1984/85 est. :	50	0	--	--	0	--	0	6,206	--	
1985/86 est. :	54	0	--	--	0	--	0	6,443	--	
Milk										
1980/81-1983/84:	349	0	0	349	0	349	0	5,912	59	
1983/84 prel. :	340	0	0	340	0	340	0	6,133	55	
1984/85 est. :	350	0	--	--	0	--	0	6,206	--	
1985/86 est. :	355	0	--	--	0	--	0	6,443	--	
<u>Haiti</u>										
Wheat 7.40										
Rice 10.97										
Corn 8.40										
Sorghum 19.53										
Dry beans 4.18										
Chickpeas 3.42										
Cassava 2.97										
Total 56.87										
Roots and tubers :										
1980/81-1983/84:	252	0	4	256	0	256	0	5,982	43	
1983/84 prel. :	255	0	5	260	0	260	0	6,161	42	
1984/85 est. :	260	0	--	--	0	--	0	6,285	--	
1985/86 est. :	260	0	--	--	0	--	0	6,410	--	
Pulses										
1980/81-1983/84:	62	0	10	72	0	72	0	5,982	12	
1983/84 prel. :	63	0	11	74	0	74	0	6,161	12	
1984/85 est. :	65	0	--	--	0	--	0	6,285	--	
1985/86 est. :	68	0	--	--	0	--	0	6,410	--	
<u>Jamaica</u>										
Wheat 22.45										
Rice 7.84										
Corn 1.45										
Yams and										
sweet										
potatoes 6.08										
Total 37.82										
Roots and tubers :										
1980/81-1983/84:	180	0	0	180	0	180	0	2,310	78	
1983/84 prel. :	180	0	0	180	0	180	0	2,379	76	
1984/85 est. :	180	0	--	--	0	--	0	2,427	--	
1985/86 est. :	180	0	--	--	0	--	0	2,475	--	

-- Not applicable.

Table 51.--Caribbean food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates

Country/ commodity	Total use 1/				Import requirements				Commercial import capacity	Food aid needs			
	Forecast :				:					:			
	domestic		Status :Nutrit.	Quantity		Value		Quantity		Value			
	production:	quo	:	based :	Status:Nutrit.:	:	Status:Nutrit.:	:		Status:Nutrit.:	:	Status:Nutrit.:	
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Table 51.--Caribbean food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates--continued

Country/ commodity	: Total use 1/		: Import requirements				: Commercial		: Food aid needs				
	: Forecast	: Status	: Nutrit.	: Quantity		: Value		: import	: Quantity		: Value		
	: production:	: quo	: based	: Status	: Nutrit.	: Status	: Nutrit.	: capacity	: Status	: Nutrit.	: Status	: Nutrit.	
	:	:	:	: quo	: based	: quo	: based	:	: quo	: based	: quo	: based	
								1,000	Million				
								tons	dollars				
Jamaica													
Major cereals													
1984/85	12	452	411	440	399	--	--	--	--	--	--	--	--
1985/86	13	461	420	448	407	--	--	--	--	--	--	--	--
Roots and tubers													
1984/85	180	189	149	9	-31	--	--	--	--	--	--	--	--
1985/86	180	193	152	13	-28	--	--	--	--	--	--	--	--
Total above 2/													
1984/85	--	--	--	443	389	99	87	256	57	187	134	42	30
1985/86	--	--	--	452	397	98	86	304	66	148	93	32	20
Caribbean, total													
Major cereals													
and roots	--	--	--	1,038	1,250	224	277	--	--	271	485	62	115
and tubers	--	--	--	1,043	1,262	217	270	--	--	199	406	45	95
Pulses													
1984/85	--	--	--	11	58	6	35	--	--	10	58	6	35
1985/86	--	--	--	9	58	5	34	--	--	8	57	5	33
Milk													
1984/85				1	5	3	10	--	--	1	4	2	9
1985/86				2	6	4	11	--	--	2	5	3	10
Total													
1984/85	--	--	--	1,050	1,313	233	322	--	--	282	547	70	159
1985/86	--	--	--	1,054	1,326	226	315	--	--	209	468	53	138

<sup>1/</sup> The sum of targeted nonfeed and feed use.

<sup>2/</sup> Cereal equivalent.

<sup>3/</sup> Less than 0.5.

-- Not applicable.

Table 52.--Summary of Caribbean cereal import requirements and food aid needs to support consumption

Country	:	:	1984/85		:	1984/85	
	:	1983/84	:	Import requirements:	:	Aid needs	:
	:	Cereal	:	Status	:	Nutrit.	:
	:	imports	:	quo	:	based	:
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<sup>1/</sup> Cereal equivalent.



Table 53.--Caribbean financial indicators, actual and projected

Country and year	1983 and 1984 conditions as of April 1984			
	Inter- national : reserves : : (on 12/31):	Exports : (fob) :	Imports : (fob) :	Debt : service : due :
	Million dollars			
<u>Dominican Republic</u>				
1980-83	165.1	940.5	1357.2	298.4
1983 prel.	104.4	864.1	1200.1	290.7
1984 est.	109	900	1250	289
1985 est.	115	950	1350	270
				Continuing soft world prices for sugar and minerals have lowered Dominican expectations for significantly higher export earnings in 1984 and 1985. Rising pressure to expand imports continues to erode the financial, economic, and political tranquility of the country.
<u>Haiti</u>				
1980-83	12.3	177.2	317.7	24.6
1983 prel.	4.0	160	310	31.8
1984 est.	4.2	180	320	30.1
1985 est.	4.4	170	330	31.3
				Financial and economic conditions are not expected to improve any in 1984 or 1985. Export earning potentials are limited while the need for imports continues to grow as the population increases.
<u>Jamaica</u>				
1980-83	96.1	869.1	1204.6	295.6
1983 prel.	87.0	772.3	1274.7	389.5
1984 est.	80	850.1	1300.1	420.1
1985 est.	80	950.1	1400.1	450.1
				Jamaica is still struggling to recover from the economic problems experienced by major industries during the seventies. Slight improvements were expected in the country's financial position in 1984 and 1985, before Reynold's Metals announced in April it is pulling out of Jamaica in 1984.

Table 54.--Caribbean import requirements and aid needs to support cereal stock adjustments 1/

Country	Estimated stock			Import requirements			Aid needs		
	Increment								
	Quantity	Value	Status	Quantity	Value	Status	Quantity	Value	Status
	: quo	: based	: Nutrit.	: quo	: based	: Nutrit.	: quo	: based	: Nutrit.
	: quo	: based	: quo	: quo	: based	: quo	: quo	: based	: quo
	1,000 tons			1,000 tons			1,000 tons		
	Million dollars			Million dollars			Million dollars		
	1,000 tons	Million dollars		1,000 tons	Million dollars		1,000 tons	Million dollars	
<u>Dominican Republic</u>									
Cereals									
1984/85	20	4		379	415		40	76	
1985/86	20	3		397	434		16	76	
Total									
1984/85	--	4	--	--	72	86	--	--	10
1985/86	--	3	--	--	73	87	--	--	6
<u>Haiti</u>									
Cereals									
1984/85	1	2/		237	467		65	143	
1985/86	2/	2/		214	451		51	145	
Total									
1984/85	--	--	--	--	60	118	--	--	16
1985/86	--	--	--	--	53	111	--	--	13
<u>Jamaica</u>									
Cereals									
1984/85	1	2/		444	390		188	87	
1985/86	2/	2/		452	397		148	86	
Total									
1984/85	--	2/	--	--	99	87	--	--	42
1985/86	--	2/	--	--	98	86	--	--	32

1/ Includes only countries for which cereal stock data are available.

2/ Less than 0.5

-- Not applicable.

CENTRAL  
AMERICA  
SUBREGION

Food aid needs in Central America are significantly lower than in the Caribbean. Except for El Salvador, countries are self-sufficient in most staples except wheat. Imports historically have been financed by exports of sugar, coffee, cocoa, bananas and beef.

The subregion generally is self-sufficient in food, and normally generates substantial surpluses for export. However, production for export as well as for local consumption has declined with the recent escalation of civil unrest, particularly in and around El Salvador and Nicaragua. During the past few years, wheat, corn, and soybean products have become the primary imports. These imports have been major sources of food, particularly in growing urban areas, as rural areas have become more isolated.

Depressed world market since 1981 have also made it difficult for Central American governments to prevent deterioration of their balance of payments. In fact, most nations have failed to maintain a favorable balance, and new financial constraints have forced additional curtailment of imports. Fortunately, the food aid needs of the Central American countries are small compared with many other low-income countries of the world. But food needs change quickly, particularly in localized areas struck by disasters. In general, agriculture fared better in 1983/84 than the year before when El Nino devastated many areas in Latin America. Nevertheless, food aid needs have not changed appreciably during the past year.

Costa Rica

Costa Rican export earnings have not grown appreciably in recent years. Following several years of growth and the highest per capita income in the region during the 1970's, Costa Rica has found it difficult to curtail its imports. Food aid programs are viewed as a tool for reallocating export earnings to purchase productive inputs such as seed, fertilizer, and machinery.

The outlook remains favorable for rice and bean production in 1984/85. Corn output should keep pace with population gains. However, wheat import needs are expected to remain strong, at about 100,000 tons, comprising most of Costa Rica's annual cereal import requirements. Currency reserves at the end of 1984 are expected to be a little better than a year earlier and the trade balance is expected to be positive. These favorable financial indicators are the result of stringent import controls, brought on in response to overspending for capital and consumer goods during the late 1970's and early 1980's when export markets were deteriorating.

Costa Rica's estimated food import needs suggest that only \$9 million in food aid (grains) will be needed in 1984/85 and none in 1985/86 to meet status quo requirements, while none will be needed in either year to meet nutritional requirements.

## El Salvador

Although some sectors of the economy continued to decline in 1983, the 4-year fall in real GDP appears to be over. Better performance of the agricultural sector and increased U.S. aid helped prevent the economy from declining further. Despite positive signs, the country still faces serious problems. Civil conflict continues to delay economic recovery and is pushing the country deeper into debt. Total war damages in 1983 amounted to more than \$220 million. In the agricultural sector, grain production recovered some from last year but is still below the pre-agrarian reform (1979) level, although output is expected to rise in 1984/85. Production of coffee, a key export crop, was about 13 percent larger than the 1981/82 crop. However, next year's crop is likely to decline about 25 percent because of the coffee crop cycle.

A recovery in production of basic food staples in 1984/85 and beyond depends on the weather (a major factor in grain and coffee production last year) and on the pace of general economic recovery. But with a population that grows 3 percent every year, basic food needs will probably exceed any growth in production. The country's food aid needs, therefore, will continue to increase and more than half of the imports will have to be purchased concessionally. El Salvador would have to import an estimated 319,000 to 334,000 tons of grain equivalent each year to reach the FAO minimum nutritional level. About 240,000 to 260,000 tons would be needed to maintain status quo consumption, with 150,000 to 190,000 purchased on concessional terms.

## Guatemala

Guatemala, like several other countries in the region, suffers from social and political unrest and economic problems. The gross national product declined by at least 3 percent in 1983. Guatemala's economy is the largest and most diversified in the region, but coffee exports still provide more than 50 percent of its agricultural foreign exchange earnings and 60 percent of total exports. Economic growth slowed as export markets for industrial and agricultural products in Central America declined, causing export earnings to fall an estimated 50 percent. Industrial exports were particularly damaged by stagnation in the Central American Common Market countries.

Food production is likely to increase slightly in 1984/85 and 1985/86 as producers respond to Government price incentives. But, with population growing at 2.7 percent per year, basic food needs are forecast to expand faster than any increase in output. In addition, area and climate constraints on wheat production will continue to force the Government to import more wheat to meet the growing demand for flour and bread. Guatemala should continue to meet 85-90 percent of its basic food needs from local production and will depend on 180,000 to 200,000 tons of imported foodstuffs annually to maintain status quo per capita consumption. Given the country's commercial import capacity, more than half of the projected imports will have to be purchased concessionally.



## Honduras

Although Honduras has one of the lowest per capita incomes in Latin America, its food import needs remain relatively small. Total food production increased more than 27 percent in the last 7 years. However, with a population growth of 3 percent per year, per capita food production grew little.

The agricultural sector was the only one that showed positive growth in 1983 and continues to be a major source of foreign earnings. But the two primary export earners--coffee and bananas--showed little increase due to reduced world demand. Wheat and corn are imported regularly. Since Honduras does not produce wheat, it must rely entirely on imports to meet its annual consumption requirements of 85,000-95,000 tons. To maintain per capita consumption at status quo levels total cereal import requirements are projected at 149,000-162,000 tons annually over the next 2 years. To raise per capita intake levels enough to meet FAO nutritional standards, the country would need to import 212,000-226,000 tons of cereals. Commercial import capacity is estimated at 124,000 tons in 1984/85, leaving aid needs at 25,000 tons for status quo cereal requirements, and 88,000 tons for nutrition-based requirements. However, if debt service fails to decline, food aid needs are anticipated to be higher in 1985/86.

## Nicaragua

The Nicaraguan economy did very well in 1983, despite disruptions caused by anti-Sandinista guerrillas, the almost total disappearance of commercial and multilateral institutional loans, and the decline of economic activity throughout the Central American region. Preliminary estimates show GDP increased 2-5 percent, making Nicaragua one of the few countries of the region to achieve positive growth. Behind the relatively positive performance are impressive total agricultural output rising from increased acreage and productivity, and a massive infusion of foreign aid from many Latin American and European governments. Agricultural production is projected to increase by some 5 percent in 1984. Efforts to achieve self-sufficiency in basic grain production have been frustrated by poor weather, particularly for corn and sorghum. Nevertheless, the overall food supply outlook is relatively good for 1984/85 and 1985/86. The status quo measure of food needs suggests import requirements of 100,000 tons annually for the next 2 years. About half of these purchases can be made commercially in 1984/85, but estimated reliance on donations or concessional imports is smaller in 1985/86.



Table 55.--Central America basic food data

Country/commodity	: Actual or :		: Use :		: Actual :		: Per :		: Commodities covered	
	: forecast :	: beginning :	: imports :	: Nonfeed :	: Feed :	: Total :	: targeted :	: forecast :	: nonfeed :	: and share of daily
	: production :	: stocks :	: use :	: use :	: use :	: ending :	: population :	: use :	: caloric intake	
	:	:	:	:	:	:	: stocks :	:	:	
	-----1,000 tons-----					Thousands	Kilos	Commodity	Percent	
<u>Costa Rica</u>										
Wheat										Wheat 11.11
1980/81-1983/84:	0	17	95	100	0	100	12	2,316	43	Rice 15.54
1983/84 prel. :	0	8	90	92	0	92	6	2,396	38	Corn 7.84
1984/85 est. :	0	6	--	--	0	--	6	2,451	--	Total 34.49
1985/86 est. :	0	6	--	--	0	--	6	2,507	--	
Rice										
1980/81-1983/84:	119	31	-7	103	0	103	40	2,316	44	
1983/84 prel. :	132	38	14	106	0	106	78	2,396	44	
1984/85 est. :	140	78	--	--	0	--	78	2,451	--	
1985/86 est. :	145	78	--	--	0	--	78	2,507	--	
Corn										
1980/81-1983/84:	76	10	46	102	21	123	10	2,316	44	
1983/84 prel. :	76	10	42	98	20	118	10	2,396	41	
1984/85 est. :	80	10	--	--	22	--	10	2,451	--	
1985/86 est. :	80	10	--	--	22	--	10	2,507	--	
<u>El Salvador</u>										
Corn										Wheat 7.08
1980/81-1983/84:	456	58	64	457	67	524	54	5,000	92	Rice 3.41
1983/84 prel. :	387	20	145	430	72	502	50	5,201	83	Corn 39.51
1984/85 est. :	460	50	--	--	71	--	50	5,342	--	Sorghum 1.84
1985/86 est. :	470	50	--	--	73	--	50	5,486	--	Dry beans 4.51
Wheat										Total 56.35
1980/81-1983/84:	0	24	118	119	0	119	23	5,000	24	
1983/84 prel. :	0	28	115	123	0	123	20	5,201	24	
1984/85 est. :	0	20	--	--	0	--	20	5,342	--	
1985/86 est. :	0	20	--	--	0	--	20	5,486	--	
Other cereals										
1980/81-1983/84:	160	7	9	44	125	169	8	5,000	9	
1983/84 prel. :	154	6	15	52	110	162	13	5,201	10	
1984/85 est. :	165	13	--	--	134	--	13	5,342	--	
1985/86 est. :	165	13	--	--	137	--	13	5,486	--	
Pulses										
1980/81-1983/84:	40	4	4	44	0	44	2	5,000	9	
1983/84 prel. :	42	0	0	42	0	42	0	5,201	8	
1984/85 est. :	40	0	--	--	0	--	0	5,342	--	
1985/86 est. :	42	0	--	--	0	--	0	5,486	--	

--Continued

Table 55.--Central America basic food data--continued

Country/commodity	:Actual or:	:targeted:	Net	Use			: Actual :	:	: Per :	Commodities covered	
	: forecast :	: beginning:	: imports:	: Nonfeed:	: Feed :	: Total :	: targeted:	: forecast :	: capita :	and share of daily	
	: production:	: stocks :	:	: use :	: use :	: use :	: ending:	: population:	: nonfeed :	per capita	
	:	:	:	:	:	:	: stocks :	:	:	caloric intake	
				-----1,000 tons-----				Thousands	Kilos	Commodity	Percent
<u>Guatemala</u>											
Corn										Wheat	7.44
1980/81-1983/84:	970	92	32	845	164	1,009	85	7,349	115	Corn	47.23
1983/84 prel. :	966	140	46	892	170	1,062	90	7,656	117	Dry beans	4.67
1984/85 est. :	1,000	90	--	--	176	--	90	7,870	--	Total	59.33
1985/86 est. :	1,000	90	--	--	181	--	90	8,090	--		
Wheat											
1980/81-1983/84:	41	19	98	140	0	140	17	7,349	19		
1983/84 prel. :	40	20	125	170	0	170	15	7,656	22		
1984/85 est. :	50	15	--	--	0	--	15	7,870	--		
1985/86 est. :	52	15	--	--	0	--	15	8,090	--		
Pulses											
1980/81-1983/84:	79	3	8	89	0	89	1	7,349	12		
1983/84 prel. :	85	1	6	92	0	92	0	7,656	12		
1984/85 est. :	85	0	--	--	0	--	0	7,870	--		
1985/86 est. :	85	0	--	--	0	--	0	8,090	--		
<u>Honduras</u>											
Corn										Wheat	6.32
1980/81-1983/84:	454	62	19	345	133	478	58	3,946	87	Corn	39.57
1983/84 prel. :	490	43	15	360	140	500	48	4,123	87	Dry beans	3.44
1984/85 est. :	460	48	--	--	143	--	48	4,246	--	Total	49.33
1985/86 est. :	465	48	--	--	147	--	48	4,374	--		
Wheat											
1980/81-1983/84:	0	17	90	89	0	89	19	3,946	22		
1983/84 prel. :	0	24	85	95	0	95	14	4,123	23		
1984/85 est. :	0	14	--	--	0	--	14	4,246	--		
1985/86 est. :	0	14	--	--	0	--	14	4,374	--		
Pulses											
1980/81-1983/84:	42	0	0	43	0	43	0	3,946	11		
1983/84 prel. :	45	0	0	45	0	45	0	4,123	11		
1984/85 est. :	44	0	--	--	0	--	0	4,246	--		
1985/86 est. :	44	0	--	--	0	--	0	4,374	--		
<u>Nicaragua</u>											
Corn										Wheat	5.98
1980/81-1983/84:	190	26	34	197	21	217	32	2,517	78	Rice	6.14
1983/84 prel. :	180	37	50	207	20	227	40	2,626	79	Corn	28.05
1984/85 est. :	190	40	--	--	22	--	40	2,702	--	Dry beans	7.16
1985/86 est. :	195	40	--	--	23	--	40	2,780	--	Total	47.33
Other cereals											
1980/81-1983/84:	70	19	53	123	0	123	19	2,517	49		
1983/84 prel. :	72	8	28	103	0	103	5	2,626	39		
1984/85 est. :	75	5	--	--	0	--	5	2,702	--		
1985/86 est. :	80	5	--	--	0	--	5	2,780	--		
Pulses											
1980/81-1983/84:	53	8	-1	52	0	52	8	2,517	21		
1983/84 prel. :	60	14	-10	55	0	55	9	2,626	21		
1984/85 est. :	55	9	--	--	0	--	9	2,702	--		
1985/86 est. :	60	9	--	--	0	--	9	2,780	--		

-- Not applicable.

Table 56.--Central America food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates

[illegible]

--Continued

Table 56.--Central America food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates--continued

Country/ commodity	: Total use 1/ :		: Import requirements :				: Food aid needs							
	: Forecast :	: Status :Nutrit.:		: Quantity :		: Value :		Commercial import capacity	: Status :Nutrit.:		: Quantity :		: Value :	
	: domestic :	: Status :	: Nutrit.:	: Quantity :	: Value :	: Status :	: Nutrit.:		: Status :	: Nutrit.:	: Quantity :	: Value :		
	: production: quo : based :	: quo : based :	: Status :Nutrit.:	: Status :Nutrit.:	: Status :Nutrit.:	: Status :Nutrit.:	: Status :Nutrit.:		: Status :Nutrit.:	: quo : based :	: quo : based :	: quo : based :	: quo : based :	

--Continued

Table 56.--Central America food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates--continued

Country/ commodity	: Total use 1/ :		: Import requirements :						: Food aid needs :						
	: Forecast :		:						Commercial import capacity	:					
	: domestic	:Status	:Nutrit.	: Quantity :		: Value :		: Quantity :		: Value :					
	:production: quo	: based	:Status	:Nutrit.	:Status	:Nutrit.	:Status	:Nutrit.		:Status	:Nutrit.				
:	:	:	:	: quo	: based	: quo	: based	:	:	: quo	: based	: quo	: based		
								1,000 tons	Million dollars	1,000 tons	Million dollars	1,000 tons	Million dollars		
Nicaragua															
Corn															
1984/85	: 190	: 233	: 223	: 43	: 33	: --	: --	: --	: --	: --	: --	: --	: --		
1985/86	: 195	: 240	: 229	: 45	: 34	: --	: --	: --	: --	: --	: --	: --	: --		
Other Cereals															
1984/85	: 75	: 132	: 98	: 57	: 23	: --	: --	: --	: --	: --	: --	: --	: --		
1985/86	: 80	: 136	: 101	: 56	: 21	: --	: --	: --	: --	: --	: --	: --	: --		
Total above 2/															
1984/85	: --	: --	: 56	: 100	: 56	: 25	: 14	: 45	: 11	: 41	: 0	: 10	: 0		
1985/86	: --	: --	: 55	: 101	: 55	: 25	: 13	: 71	: 17	: 3	: 0	: 1	: 0		
Pulses															
1984/85	: 55	: 56	: 52	: 1	: -3	: 1	: -2	: 5	: 4	: 0	: 0	: 0	: 0		
1985/86	: 60	: 57	: 54	: -3	: -6	: -2	: -5	: 8	: 7	: 0	: 0	: 0	: 0		
Total															
1984/85	: --	: --	: --	: --	: --	: 26	: 14	: --	: 15	: --	: --	: 10	: 0		
1985/86	: --	: --	: --	: --	: --	: 25	: 13	: --	: 24	: --	: --	: 1	: 0		
Central America, total															
Cereals															
1984/85	: --	: --	: --	: 797	: 830	: 192	: 188	: --	: --	: 362	: 449	: 86	: 104		
1985/86	: --	: --	: --	: 860	: 890	: 189	: 208	: --	: --	: 340	: 507	: 78	: 99		
Total															
1984/85	: --	: --	: --	: --	: --	: 196	: 209	: --	: --	: --	: --	: 98	: 124		
1985/86	: --	: --	: --	: --	: --	: 206	: 216	: --	: --	: --	: --	: 92	: 136		

1/ The sum of targeted nonfeed and feed use.

2/ Cereal equivalent.

-- Not applicable.

Table 57.--Summary of Central American cereal import requirements and food aid needs to support consumption status quo and nutrition-based estimates

Country	:	:	1984/85		:	1984/85			
	:	1983/84	<u>Import requirements</u>			<u>Aid needs</u>			
	:	Imports	Status	:	Nutrit.	:	Status	:	Nutrit.
	:	:	quo	:	based	:	quo	:	based
	:	----- <u>1,000 tons</u> -----							
	:								
	:								
Costa Rica	:	146	123		29		38		0
El Salvador	:	275	243		319		153		229
	:								
Guatemala	:	171	182		214		105		137
	:								
Honduras	:	100	149		212		25		83
	:								
Nicaragua	:	78	100		56		41		0
	:								
Cen. America, total	:	770	797		830		362		449
	:								



Table 58.--Central America financial indicators, actual and projected

Country and year	:	Inter- national reserves (on 12/31):	:	Exports (fob)	:	Imports (fob)	:	Debt service due	:	1983 and 1984 conditions as of April 1984
	:	<u>Million dollars</u>								
<u>Costa Rica</u>	:									
1980-83	:	171.5	936.9	1075.1	237.5	The external financial situation is expected to remain critical for another year or two even though export earnings are expected to improve in 1984 and 1985. A surge in imports in 1984 however, will exceed any gain in exports and the trade account deficit will increase.				
1983 prel.	:	183.1	851	994	412.2					
1984 est.	:	191.9	899	1084	406.9					
1985 est.	:	201.6	1150	1050	433.9					
<u>El Salvador</u>	:									
1980-83	:	86.5	800	911	61	The financial situation in El Salvador has been totally distorted by injections of military and economic aid in recent years. Although export earnings from coffee and cotton were up in 1983, the trade balance deficit continued to be negative.				
1983 prel.	:	87.8	737.4	870	80.1					
1984 est.	:	92.1	776.5	920	93.2					
1985 est.	:	96.7	599	1000	95.6					
<u>Guatemala</u>	:									
1980-83	:	199.5	1202.3	1412.6	136.6	The value of export earnings declined almost 4 percent in 1983 primarily because of lower international demand. Coffee exports, which account for more than 25 percent of the total exports, suffered a reduction of 18 percent from the previous year.				
1983 prel.	:	90.9	790.5	1353.8	185.7					
1984 est.	:	95	895.8	1500	198.6					
1985 est.	:	100	1000	1800	192.6					
<u>Honduras</u>	:									
1980-83	:	113	743.9	817.6	136.6	Honduras is expected to receive considerable amounts of economic aid in 1984 and 1985. This is expected to partially offset the sluggish growth in exports projected for 1984 and 1985, but merchandise imports may be difficult to control.				
1983 prel.	:	90.9	665	737	185.7					
1984 est.	:	95.2	714	869	198.6					
1985 est.	:	100	740	880	192.6					
<u>Nicaragua</u>	:									
1980-83	:	0	442.7	786.5	207.7	Financial situation in Nicaragua is confused by the civil war. Foreign exchange difficulties presented the country from importing needed inputs to insure economic activity.				
1983 prel.	:	0	420	700	283.1					
1984 est.	:	0	425	800	311.1					
1985 est.	:	0	467.5	880	292.3					

Table 59.--Central America import requirements and aid needs to support cereal stock adjustments <sup>1/</sup>

Country	Estimated stock		Import requirements				Aid needs			
	increment		Quantity		Value		Quantity		Value	
	Quantity	Value	Status	Nutrit.	Status	Nutrit.	Status	Nutrit.	Status	Nutrit.
	:	:	quo	based	quo	based	quo	based	quo	based
	1,000 tons	Million dollars	1,000 tons		Million dollars		1,000 tons		Million dollars	
<u>Costa Rica</u>										
Cereals										
1984/85	8	2	131	37	30	9	46	8	11	2
1985/86	2	1	128	31	29	7	2	2	1	1
Total										
1984/85	--	2	--	--	30	9	--	--	11	2
1985/86	--	1	--	--	29	7	--	--	1	1
<u>El Salvador</u>										
Cereals										
1984/85	17	4	260	336	69	89	170	246	45	65
1985/86	3	1	260	337	67	87	191	268	49	70
Total										
1984/85	--	4	--	--	72	97	--	--	47	72
1985/86	--	1	--	--	70	95	--	--	51	77
<u>Guatemala</u>										
Cereals										
1984/85	30	6	212	244	42	49	135	167	27	33
1985/86	4	1	218	250	42	48	128	160	25	31
Total										
1984/85	--	6	--	--	--	--	--	--	--	--
1985/86	--	1	--	--	--	--	--	--	--	--
<u>Honduras</u>										
Cereals										
1984/85	19	4	168	231	32	43	44	102	9	20
1985/86	14	3	176	240	32	44	39	100	8	18
Total										
1984/85	--	4	--	--	34	43	--	--	10	20
1985/86	--	3	--	--	35	44	--	--	9	18
<u>Nicaragua</u>										
Cereals										
1984/85	11	3	111	67	28	17	50	11	13	3
1985/86	6	1	107	61	26	14	9	6	2	1
Total										
1984/85	--	3	--	--	29	17	--	--	13	3
1985/86	--	1	--	--	26	14	--	--	2	1

<sup>1/</sup> Includes only countries for which cereal stock data are available.

-- Not applicable.

SOUTH AMERICA  
SUBREGION

This year, the Andean countries are recovering from crop damage inflicted by El Nino in 1982/83, but as a region they face persistent food problems. Bolivia, Peru and Ecuador cannot meet the minimum food requirements defined by FAO for adequate national diets. Colombia has pockets of malnutrition. Through 1985, these countries are expected to import grain and oilseeds through concessional sales. Three of the countries will remain short of adequate national diets, even by augmenting production with trade and outside aid.

To maintain the status quo in 1984/85, Andean countries will have to import about 3 million tons of grain valued at \$525 million and 5,000 tons of milk valued at \$10 million. Colombia meets its overall nutritional needs but Bolivia, Ecuador and Peru would have to concessionally import an additional 1.2 million tons of grain and 13,000 tons of milk to meet their nutritional needs. Peru is the region's largest food importer but Ecuador and Bolivia fall equally short in meeting nutritional needs.

Bolivia

In the Andean region, Bolivia was the hardest hit by El Nino in 1982/83, and suffered a 30-percent shortfall in its agricultural production. While Bolivia is beginning to recover, shortages of seed, decimation of the livestock herds, and outmigration of farmers from the drought-stricken Altiplano will make the recovery less than complete in the short run. Production of potatoes, the principal staple, will be down 20 percent from normal; barley and corn will be down, but rice and soybeans should recover to predisaster levels. Livestock production will require 5-7 years for full recovery.

Bolivia is the poorest country in South America, and its national diet is only about 85 percent of the FAO recommended minimum. Its financial situation has deteriorated since 1977. It had a 6-percent decline in real income in 1983, coupled with 300-percent inflation. The value of exports hit a low point in 1983 as prices of primary export products, like tin, declined. However, exports still exceeded the value of imports. Interest payments on Bolivia's foreign debt have ballooned in recent years. International reserves are \$120-130 million. Its general economic situation, coupled with political instability and a limited human resource base (6 million people), compounds its problems.

The disaster also increased food imports and donations. Bolivia has received wheat, flour, nonfat dried milk, vegetable oil, corn meal, and lentils for several years under P.L. 480 Titles II and III. But in 1982/83, 87 percent of Bolivian wheat imports were P.L. 480 Title III. The European Community, Canada, Belgium, Sweden, and Switzerland also donated other food.

Estimated status quo food imports of about 300,000 tons a year during 1982/83-1984/85 are well above the predisaster levels. But if nutritional requirements were to be fully met, annual aid needs would be closer to 550,000 metric tons in 1984/85, raising the import bill to \$80 million.

## Colombia

Calorically, Colombia is better off than most of its neighbors, although there are pockets of malnutrition due to low incomes. Colombia, which produces all but about 5 percent of its food needs, is able to keep its overall per capita food intake well above the FAO recommended level. Domestically produced rice, corn flour, cassava, plantains, beans, and soft red wheat are the major carbohydrates and are supplemented by about 500,000 tons of imported wheat. Wheat and other agricultural imports are purchased commercially. Colombia's agricultural and economic conditions declined somewhat in 1983/84. Population growth outpaced the 1 percent growth in food production but overall economic stagnation caused food demand to slow.

Colombia's international financial position is slipping. Its total foreign debt is about \$9.9 billion, and so far Colombia has not renegotiated its debt. The country's trade deficit tripled from a year ago, and the Government has initiated measures to limit the 1984 deficit. Exports of coffee, bananas, flowers, and tobacco offset declines in beef, cotton and cheese exports but weren't large enough to offset nonagricultural imports. Colombia's foreign reserves, augmented by loans, are \$3 billion and projected to \$3.4 billion for 1985. Debt service is less than in neighboring countries, but may be a problem in the future. Colombia has already expressed an interest in GSM-102 credit. Status quo grain imports for 1984/85 are 770,000 metric tons valued at \$150 million.

## Ecuador

In the mid-seventies Ecuador benefited from the oil boom, and has been able to commercially import needed food. U.S. P.L. 480 Title II totaled only about \$1-1.5 million annually in the early eighties. During those years Ecuador went from being a P.L. 480 recipient to a commercial purchaser of food. In the same period, Ecuador met only about 90 percent of its nutritional needs. The country's economic position has recently declined with the slowdown in oil revenues.

This year, Ecuador is recovering from damage done by El Nino in 1983, when the agricultural production registered a 15-percent decline. Repeated plantings of corn, rice, and other coastal grain crops were washed out several times. Ecuador imported commercially about 55,000 tons of rice and 30,000 of corn and the FAO donated 5,000 tons of rice. Food donations also came from the United States under P.L. 480 Title II, Argentina, and private agencies.

Wheat imports will continue to grow, and are forecast at 350,000 tons in 1984/85. Wheat is Ecuador's largest agricultural import, and imports are the major source of wheat, since domestic production is stagnant at 22-25,000 tons and domestic market conditions preclude future growth. Status quo grain import needs are about 300-350,000 tons, but if Ecuador were to meet its total nutrition-based needs, it would have to import nearly 600,000 tons. In addition, Ecuador will import about 4,000 tons of milk, nearly all through aid programs, to meet its status quo needs. To meet its nutritional requirements, Ecuador would have to



import about 13,000 tons of milk. Meeting all nutritional requirements in 1984/85 would take about \$156 million, compared with a status quo import bill of \$86 million.

While Ecuador increased its agricultural imports in 1982/83 to augment reduced domestic crops, the country cut total imports to maintain a positive balance of trade, and rescheduled some of its long term debt. Ecuador's foreign reserves slipped from \$210 million in 1982 to \$154 million in 1983. The general economy registered a 3-percent decline.

In 1984, financing of imports will be mostly by GSM-102, and this will be crucial in the coming year as other suppliers view Ecuador as a potential market for grain and oilseeds. Ecuador probably will have to seek additional food aid.

## Peru

In most years, Peruvian agriculture has difficulty keeping up with the food needs generated by a 2.6-percent population growth rate. But a 13-percent decline in agricultural production resulting from damage from El Nino created extraordinary shortages. Sugar and potato crops were especially hard hit. Fish meal (an important foreign exchange earner) declined by 60 percent. Rice and corn production were both down, but carryover stocks cushioned the production shortfall. By the spring of 1984, the new crop cycle had alleviated some of the shortages.

The general economic situation worsened last year as real GDP declined 12 percent and Peru faced an inflation rate of 125 percent. International prices for Peru's primary product exports (mainly minerals) however, did turn up, causing the trade balance to recover from the negative balance that had persisted since 1981. While Peru's international reserves have slipped to \$1 billion, debt service from all loans is one of the highest in South America.

U.S. wheat is exported to Peru through GSM-102, and P.L. 480 Title I has been granted since 1978. Additional import food needs resulting from the crop disaster were also met by rice imports under P.L. 480 Title II and donations from private agencies.

While domestic production should recover somewhat in 1983/84, Peru will have a persistent problem in providing adequate food through 1985. To maintain the status quo, Peru would need to import over 1.5 million tons of grain through 1985. To meet the population's minimal nutritional needs, the country would have to import 1.8 million tons.



Table 60.--South America basic food data

[illegible]

--Continued

Table 60.--South America basic food data--continued

	: Actual or forecast	: targeted beginning	: Net imports	: Nonfeed use	: Feed use	: Total use	: Actual or targeted	: Actual or forecast	: Per capita nonfeed use	: Commodities covered and share of daily per capita caloric intake
Country/commodity:	production:	stocks :	:	:	:	:	ending stocks :	population:	:	:
			-1,000 tons-					Thousands	Kilos	Commodity Percent
Ecuador										
Wheat										
1980/81-1983/84:	23	10	319	323	14	337	16	8,338	39	Wheat 11.74
1983/84 prel. :	23	5	335	317	10	327	36	8,686	36	Rice 10.02
1984/85 est. :	24	36	--	--	15	--	36	8,930	--	Corn 3.77
1985/86 est. :	24	36	--	--	15	--	36	9,180	--	Potatoes 6.11
										Cassava 4.50
										Plantains 6.26
										Milk 7.82
										Total 50.20
Rice										
1980/81-1983/84:	214	60	12	224	4	228	58	8,338	27	
1983/84 prel. :	162	67	51	263	2	265	15	8,686	30	
1984/85 est. :	225	15	--	--	4	--	15	8,930	--	
1985/86 est. :	240	15	--	--	4	--	15	9,180	--	
Corn										
1980/81-1983/84:	227	47	11	38	195	233	52	8,338	5	
1983/84 prel. :	258	7	35	2	240	242	58	8,686	0	
1984/85 est. :	260	58	--	--	208	--	58	8,930	--	
1985/86 est. :	270	58	--	--	214	--	58	9,180	--	
Roots and tubers										
1980/81-1983/84:	1,378	0	5	1,383	0	1,383	0	8,338	166	
1983/84 prel. :	1,484	0	0	1,484	0	1,484	0	8,686	171	
1984/85 est. :	1,456	0	--	--	0	--	0	8,930	--	
1985/86 est. :	1,495	0	--	--	0	--	0	9,180	--	
Milk										
1980/81-1983/84:	764	0	12	776	0	776	0	8,338	93	
1983/84 prel. :	750	0	15	765	0	765	0	8,686	88	
1984/85 est. :	783	0	--	--	0	--	0	8,930	--	
1985/86 est. :	800	0	--	--	0	--	0	9,180	--	
Peru										
Wheat										
1980/81-1983/84:	94	90	921	1,020	0	1,020	85	18,384	55	Wheat 17.68
1983/84 prel. :	80	100	1,000	1,100	0	1,100	80	19,161	57	Rice 11.32
1984/85 est. :	100	80	--	--	0	--	80	19,708	--	Corn 9.71
1985/86 est. :	105	80	--	--	0	--	80	20,273	--	Potatoes 6.62
										Cassava 2.70
										Plantains 2.92
										Total 50.90
Rice										
1980/81-1983/84:	414	150	133	538	0	538	159	18,384	29	
1983/84 prel. :	400	200	116	600	0	600	116	19,161	31	
1984/85 est. :	420	116	--	--	0	--	116	19,708	--	
1985/86 est. :	440	116	--	--	0	--	116	20,273	--	
Corn										
1980/81-1983/84:	570	45	463	505	515	1,020	58	18,384	28	
1983/84 prel. :	525	60	500	485	530	1,015	70	19,161	25	
1984/85 est. :	600	70	--	--	551	--	70	19,708	--	
1985/86 est. :	650	70	--	--	567	--	70	20,273	--	
Roots and tubers										
1980/81-1983/84:	2,286	0	-25	2,261	0	2,261	0	18,384	123	
1983/84 prel. :	1,991	0	0	1,991	0	1,991	0	19,161	104	
1984/85 est. :	2,560	0	--	--	0	--	0	19,708	--	
1985/86 est. :	2,775	0	--	--	0	--	0	20,273	--	

-- Not applicable.

Table 61.--South America food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates

Country/ commodity	Total use 1/		Import requirements						Commercial import capacity	Food aid needs			
	Forecast												
	domestic production	Status quo	Nutrit. based	Quantity	Value	Status quo	Nutrit. based	Quantity		Value	Status quo	Nutrit. based	
	:	:	:	:	:	:	:	:		:	:	:	:

Continued--

Table 61.--South America food requirements, import requirements, and food aid needs to support consumption, status quo and nutrition-based estimates--continued

Country/ commodity	Total use 1/		Import requirements				Commercial		Food aid needs			
	Forecast	Status	Quantity		Value		Import		Quantity		Value	
	domestic	quo	based		quo		capacity		Status		Status	
	production:	:	Nutrit.		Nutrit.		Status		Nutrit.		Nutrit.	
			quo	based	quo	based	quo	based	quo	based	quo	based
							1,000	Million				
			-----1,000 tons-----		Million dollars		tons	dollars			1,000 tons	Million dollars
<u>Ecuador</u>												
Wheat												
1984/85	24	360	338	336	313	--	--	--	--	--	--	--
1985/86	25	371	346	346	321	--	--	--	--	--	--	--
Rice												
1984/85	225	243	237	18	12	--	--	--	--	--	--	--
1985/86	240	250	245	10	5	--	--	--	--	--	--	--
Corn												
1984/85	260	249	302	-11	42	--	--	--	--	--	--	--
1985/86	270	256	311	-14	41	--	--	--	--	--	--	--
Roots and tubers												
1984/85	1,456	1,480	2,197	24	741	--	--	--	--	--	--	--
1985/86	1,495	1,521	2,248	26	753	--	--	--	--	--	--	--
Total above 2/												
1984/85	--	--	--	351	583	76	127	255	50	96	328	20
1985/86	--	--	--	350	587	74	124	312	66	38	275	8
Milk												
1984/85	783	831	928	4	13	10	29	0	0	4	13	9
1985/86	800	855	953	5	14	10	29	0	0	5	13	10
Total												
1984/85	--	--	--	--	--	86	156	--	50	--	--	29
1985/86	--	--	--	--	--	84	153	--	66	--	--	18
<u>Peru</u>												
Wheat												
1984/85	100	1,093	1,101	993	1,001	--	--	--	--	--	--	--
1985/86	105	1,124	1,132	1,019	1,027	--	--	--	--	--	--	--
Rice												
1984/85	420	576	552	156	132	--	--	--	--	--	--	--
1985/86	440	593	568	153	128	--	--	--	--	--	--	--
Corn												
1984/85	600	1,094	1,073	494	473	--	--	--	--	--	--	--
1985/86	650	1,125	1,139	475	489	--	--	--	--	--	--	--
Roots and tubers												
1984/85	2,560	2,427	3,340	-133	780	--	--	--	--	--	--	--
1985/86	2,775	2,497	3,468	-278	693	--	--	--	--	--	--	--
Total above 2/												
1984/85	--	--	--	1,586	1,854	255	298	1,404	226	180	449	29
1985/86	--	--	--	1,548	1,837	241	286	1,802	281	0	34	0
<u>South America, total:</u>												
Total grain equiv.												
1984/85	--	--	--	3,031	2,989	526	505	2,245	389	786	1,228	137
1985/86	--	--	--	2,894	2,954	487	484	2,752	460	397	735	27
Milk												
1984/85	--	--	--	4	13	10	29	0	0	4	13	9
1985/86	--	--	--	5	14	10	29	0	0	5	13	10
Total												
1984/85	--	--	--	--	--	536	534	--	389	--	--	140
1985/86	--	--	--	--	--	497	513	--	460	--	--	37

1/ The sum of targeted nonfeed and feed use.

2/ Cereal equivalent.

-- Not applicable.

Table 62.--Summary of South America cereal import requirements and food aid needs to support consumption 1/

Country	:	:	1984/85	:	1984/85
	:	1983/84	:Import requirements:	:	Aid needs
	:	Cereal	: Status	: Nutrit.:	Status : Nutrit.
	:	imports	: quo	: based	: quo : based
	:		-----1,000 tons-----		
	:				
Bolivia	:	294	327	552	226 451
Colombia	:	870	768	0	284 0
Ecuador	:	421	351	583	96 328
Peru	:	1,616	1,586	1,854	180 449
South America, total:	:	3,201	3,032	2,989	786 1,228
1/ Cereal equivalent.	:				

1/ Cereal equivalent.

Table 63.--South America financial indicators, actual and projected

Country and year	Inter- national reserves (on 12/31):	Exports (fob)	Imports (fob)	Debt service: due	
					1983 and 1984 conditions as of April 1984
<hr/>					
	<u>Million dollars</u>				
<u>Bolivia</u>					
1980-83	122.0375	857	560.3	409.6	Bolivia is maintaining its trade balance, but at lower levels than in recent years. Bolivia's debt service is equal to nearly 80 percent of exports. GDP is expected to decline about 5 percent in 1984.
1983 prel.	126.35	750	452.3	537.9	
1984 est.	132.42	700	523	477.7	
1985 est.	139.1	763	628	525.4	
<u>Colombia</u>					
1980-83	4140.1	3452.8	4924	914.9	The expected growth in coffee exports and the continued expected upward trend in fuel oil exports will not overcome the negative trade balance that has occurred since 1980. Colombia faces a heavy foreign debt burden (about one half the value of exports).
1983 prel.	3127.4	3300	5457	1000	
1984 est.	3277	3800	5200	1200	
1985 est.	3442	4300	5800	1259	
<u>Ecuador</u>					
1980-83	548.995	2357.1	2126.6	612.8	The expected increase in exports will exceed imports in 1984. The sucre was devaluated nearly 50 percent in 1983 and will be devalued again in 1984. Debt service on public debt alone now measures well over half of merchandise exports. Some economic recovery is expected in 1984 compared to the 3 percent decline in GDP in 1983.
1983 prel.	246.38	2200	2003.3	788.6	
1984 est.	258.22	2486	2317.4	830	
1985 est.	271.25	2700	2200	843	
<u>Peru</u>					
1980-83	1384.475	3347	3218	1635.2	Some recovery is expected in 1984 exports as prices for metals (copper, silver, lead, and zinc) increase and petroleum product prices (the major export) remain steady. Debt service, projected at 70 percent of exports in 1984 will be a drag on economic recovery. Peru suffered a 13-percent decline in real GDP in 1983 and will not recover fully in 1984.
1983 prel.	1051.8	3015	2221	1609	
1984 est.	1102.4	3500	2500	1699	
1985 est.	1158	4000	3000	1595	



Table 64.--South America import requirements and aid needs to support cereal stock adjustments 1/

Country	Estimated stock		Import requirements				Aid needs			
	increment		Quantity		Value		Quantity		Value	
	Quantity	Value	Status	Nutrit.	Status	Nutrit.	Status	Nutrit.	Status	Nutrit.
	:	:	quo	based	quo	based	quo	based	quo	based
	1,000	Million								
	tons	dollars	1,000 tons		Million dollars		1,000 tons		Million dollars	
<u>Bolivia</u>										
Cereals										
1984/85	27	4	354	579	51	84	253	478	37	69
1985/86	15	2	298	545	42	77	194	441	27	62
Total										
1984/85	--	4	--	--	51	84	--	--	37	69
1985/86	--	2	--	--	42	77	--	--	27	62
<u>Colombia</u>										
Cereals										
1984/85	51	10	819	-13	157	-2	335	51	65	10
1985/86	55	10	768	-75	142	-14	570	55	44	10
Total										
1984/85	--	10	--	--	157	-2	--	--	65	10
1985/86	--	10	--	--	142	-14	--	--	44	10
<u>Ecuador</u>										
Cereals										
1984/85	25	6	376	608	82	133	121	353	26	77
1985/86	18	4	368	605	78	128	56	293	12	62
Total										
1984/85	--	6	--	--	92	162	--	--	35	106
1985/86	--	4	--	--	89	157	--	--	22	91
<u>Peru</u>										
Cereals										
1984/85	52	8	1,638	1,906	263	306	235	501	37	80
1985/86	35	5	1,583	1,872	246	291	35	69	5	10
Total										
1984/85	--	8	--	--	263	306	--	--	37	80
1985/86	--	5	--	--	246	291	--	--	5	10

1/ Includes only countries for which cereal stock data are available.

-- Not applicable.

ALLOCATING  
FOOD  
AID

Many factors could be usefully considered in dividing limited food aid supplies among needy countries. These range from quantitative factors such as measures of relative needs, to more qualitative factors such as recipient countries' efforts to maintain budgetary discipline and to implement self-help policies encouraging greater local production.

A detailed discussion and comparison of qualitative factor lies beyond the scope of this study as it is currently defined. This section offers two simple quantitative methods for comparing aid needs across countries. First, the food aid needs calculated in earlier sections are scaled back proportionally across countries to match the aid availabilities that were also estimated earlier. Second, food aid needs are calculated in per capita terms and countries are ranked according to the magnitude of per capita aid needs. The allocations and rankings presented here are examples of possible allocations and should not be construed as official USDA recommendations.

Scaling Down  
Food Aid Needs

To generate table 65, total aid availabilities are expressed as a proportion of total aid needs. This proportion will be less than 1.0 as long as food aid donors do not contribute enough to satisfy the needs of recipient countries. This proportion, or ratio, is then applied to food aid estimates to scale them back so that total aid needs equal total availabilities.

Given the aid availabilities estimated for 1984/85, each low-income country is accordingly allocated 81 percent of its status quo aid needs and 29 percent of its nutrition-based aid needs.

This simplistic scaling-down of aid needs has one important shortcoming from an equity perspective--it does not offer an effective indication of the relative severity of needs across countries. Another quantitative method for comparing needs is therefore presented below.

Ranking  
Countries

Table 66 provides a per capita ranking of aid needs. Several countries with the same absolute level of aid needs have quite

Table 65-- Food aid needs by country, total and scaled down to world food aid availabilities, 1984/85

Region/Country	Population	Status quo- based food aid needs		Nutrition-based food aid needs	
		Total	Scaled	Total	Scaled
	thousand	million dollars			
Angola	7981	23.99	19.43	31.90	5.14
Benin	4033	15.44	12.51	17.74	6.73
Burundi	4826	7.05	5.71	23.20	8.55
Cameroon	9770	8.30	6.72	29.47	2.90
Cape Verde	304	8.71	7.06	10.00	5.53
Central Afr. Rep.	2610	3.40	2.75	19.08	41.69
Chad	5246	21.17	17.15	143.75	5.29
Comoros	467	6.40	5.18	18.23	2.86
Congo	1798	1.98	1.60	9.86	0.00
Djibouti	293	-4.08	-3.30	NA	-39.73
Egypt	48407	557.64	451.69	-137.00	0.00
Equatorial Guinea	282	2.59	2.10	NA	57.49
Ethiopia	32716	73.59	59.61	198.24	0.70
Gambia	670	4.49	3.64	2.43	45.25
Ghana	14254	69.44	56.25	156.04	34.75
Guinea	5734	4.60	3.73	119.83	7.30
Guinea-Bissau	858	12.88	10.43	25.17	46.86
Kenya	20177	44.81	36.30	161.57	2.76
Lebanon	2619	-0.23	-0.19	9.52	10.39
Lesotho	1512	38.69	31.34	35.82	4.54
Liberia	2232	19.51	15.80	15.64	15.88
Madagascar	9909	98.69	79.94	54.75	6.41
Malawi	7056	-6.98	-5.65	22.11	64.98
Mali	7735	50.52	40.92	224.07	8.40
Mauritania	1656	23.55	19.08	28.96	-1.61
Mauritius	1034	-1.74	-1.41	-5.55	-61.71
Morocco	24258	-228.55	-185.13	-212.80	74.41
Mozambique	13994	98.22	79.56	256.57	-5.01
Niger	6495	38.05	30.82	-17.28	8.74

Continued

Table 65-- Food aid needs by country, total and scaled down to  
world food aid availabilities, 1984/85--Continued

Region/Country	Population	Status quo- based food aid needs		Nutrition-based food aid needs	
		Total	Scaled	Total	Scaled
	thousand	million dollars			
Rwanda	6036	15.05	12.19	30.13	19.80
Senegal	6755	69.43	56.24	68.28	1.25
Sierra Leone	3909	17.36	14.06	4.30	44.66
Somalia	6542	77.00	62.37	154.00	35.38
Sudan	21682	188.00	152.28	122.00	3.19
Swaziland	671	7.92	6.42	11.00	31.75
Tanzania	21902	75.95	61.52	109.49	12.92
Togo	3003	22.22	18.00	44.56	-11.02
Tunisia	7386	34.79	28.18	-38.00	34.40
Uganda	14732	-6.94	-5.62	118.61	16.39
Upper Volta	6907	24.10	19.52	56.52	5.37
North Yemen	6067	27.19	22.02	18.51	9.97
South Yemen	2211	32.05	25.96	34.37	57.43
Zaire	33092	25.74	20.85	198.02	14.41
Zambia	6770	33.71	27.31	49.68	3.19
Afghanistan	14792	3.75	3.04	10.99	332.21
Bangladesh	102735	117.00	94.77	1145.55	565.57
India	762507	-438.10	-354.86	1950.24	-106.91
Indonesia	167833	-304.15	-246.36	-368.65	7.53
Kampuchea	6249	52.37	42.42	25.97	-1.42
Laos	3819	-11.76	-9.53	-4.91	59.41
Nepal	16996	-1.19	-0.96	204.87	-47.58
Pakistan	99841	8.33	6.75	-164.06	93.67
Philippines	55819	267.00	216.27	323.00	37.41
Sri Lanka	16206	39.00	31.59	129.00	32.49
Vietnam	59575	-41.53	-33.64	112.03	18.96
Bolivia	6195	32.75	26.53	65.37	-26.90
Colombia	28842	54.51	44.15	-92.76	-3.75
Cost Rica	2761	8.76	7.10	-12.93	5.51
Dominican Republic	6588	6.00	4.86	19.00	29.00
Ecuador	9380	29.00	23.49	100.00	19.72
El Salvador	4981	43.00	34.83	68.00	11.60
Guatemala	8206	30.00	24.30	40.00	34.80
Haiti	5721	22.00	17.82	120.00	4.73
Honduras	4575	5.60	4.54	16.31	8.69
Jamaica	2403	42.01	34.03	29.98	-0.77
Nicaragua	3030	10.00	8.10	-2.67	20.96
Peru	20273	29.07	23.55	72.29	0.00

Table 66--Per Capita Food Aid Needs, 1984/85 - Ranked

Country	Per Capita Status quo-based		Per Capita Nutrition-based	
	Rank	Dollars	Rank	Dollars
Angola	39	6.50	43	8.64
Benin	37	7.42	44	8.52
Burundi	47	3.13	38	10.30
Cameroon	52	1.78	49	6.31
Cape Verde	1	67.79	1	77.83
Central Afr. Rep.	48	2.69	28	15.10
Chad	33	8.81	4	59.83
Comoros	7	26.97	2	76.83
Congo	49	2.35	33	11.68
Djibouti	67	-28.90	56	0.00
Egypt	10	24.33	62	-5.98
Equatorial Guinea	15	18.78	55	0.00
Ethiopia	44	4.46	31	12.01
Gambia	25	11.34	50	6.14
Ghana	27	9.70	20	21.80
Guinea	53	1.76	8	45.83
Guinea-Bissau	5	34.38	3	67.18
Kenya	43	4.85	23	17.48
Lebanon	58	-0.23	42	9.36
Lesotho	3	45.97	11	42.56
Liberia	16	18.31	29	14.68
Madagascar	12	21.24	32	11.78
Malawi	62	-2.04	47	6.47
Mali	22	12.47	5	55.30
Mauritania	4	36.32	10	44.67
Mauritius	64	-4.44	65	-14.16
Morocco	66	-19.49	66	-18.14
Mozambique	20	13.09	14	34.20
Niger	24	12.05	61	-5.47
Rwanda	42	4.89	40	9.80
Senegal	11	22.67	19	22.30
Sierra Leone	32	9.14	53	2.26
Somalia	9	25.57	6	51.14
Sudan	14	19.32	30	12.54
Swaziland	8	26.67	12	37.05
Tanzania	36	7.98	35	11.51

Continued



Table 66--Per Capita Food Aid Needs,  
1984/85 - Ranked--Continued

Country	Per Capita Status quo-based		Per Capita Nutrition-based	
	Rank	Dollars	Rank	Dollars
Togo	19	13.49	18	27.05
Tunisia	23	12.15	64	-13.27
Uganda	59	-0.96	24	16.40
Upper Volta	38	6.66	27	15.61
North Yemen	30	9.27	48	6.31
South Yemen	6	33.90	13	36.36
Zaire	54	1.46	37	11.25
Zambia	26	11.01	26	16.22
Afghanistan	55	0.40	54	1.17
Bangladesh	51	1.79	22	17.55
India	60	-1.01	51	4.48
Indonesia	63	-3.22	60	-3.91
Kampuchea	18	14.37	46	7.12
Laos	65	-5.29	57	-2.21
Nepal	57	-0.12	21	20.53
Pakistan	56	0.17	59	-3.31
Philippines	28	9.64	34	11.67
Sri Lanka	41	4.95	25	16.39
Vietnam	61	-1.25	52	3.38
Bolivia	17	14.39	17	28.72
Colombia	40	5.52	63	-9.39
Cost Rica	21	12.60	67	-18.60
Dominican Republic	50	2.26	45	7.16
Ecuador	35	8.44	16	29.09
El Salvador	13	20.99	15	33.19
Guatemala	34	8.44	36	11.25
Haiti	31	9.26	7	50.52
Honduras	46	3.40	39	9.90
Jamaica	2	63.32	9	45.19
Nicaragua	29	9.55	58	-2.55
Peru	45	3.86	41	9.60

- 1| Food aid needs are divided by population after being adjusted to compensate for variations in percent of diet composed of staple foods covered in this report.

different per capita needs. The wide margin between per capita measures reflects differences in the severity of the food problems these countries face.<sup>1/</sup>

The pronounced disparity between the status quo and nutrition-based results also points up the differences inherent in the two procedures. Countries such as Cape Verde, Comoros, and Somalia rank high in both cases. As a general rule, this indicates a large margin between domestic per capita food availabilities and the supplies of staples required to raise per capita intake to the levels associated with the FAO recommended minimum. This sizable gap has been filled in recent years either by large commercial imports which are no longer affordable, or by food aid. In the case of Somalia, high per capita estimates are also due to an influx of more refugees than can be fed from domestically produced supplies or commercial imports.

Countries like Haiti, Guinea, and Chad have much higher nutrition-based than status quo-based per capita aid needs. The wide margin is indicative of a serious gap between recent per capita food intake levels and the supplies necessary to achieve the FAO recommended minimum. This sizable gap has not been filled by commercial imports or food aid in recent years.

Countries such as Egypt, Madagascar and Equatorial Guinea have high per capita aid needs using the status quo method but relatively low needs using the nutrition method. In these countries, domestic production, commercial imports, or food aid donations have pushed per capita intake levels close to or above the FAO minimum. Aid allocations to those countries using the status quo-based estimates would support consumption above the FAO recommended minimum.

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<sup>1/</sup>Adjustments were made in both the status quo- and nutrition-based aid indicators to compensate for the different proportion of the diet made up by the staples analyzed in the report. The percentage of the diet covered--derived from the 1975-77 FAO Food Balance Sheets--must be factored into the allocation estimates to prevent biasing per capita aid needs upward or downward for countries with a large or small proportion of their diets made up of the staples analyzed. Other things being equal, a country with 75 percent of its staple diet covered would have a greater per capita food aid need than a country with 50 percent of its staple diet covered. To incorporate this adjustment, per capita food aid needs are calculated as follows: estimated food aid need (\$)/(Percent of diet comprised by commodities analyzed in this report/group mean percent of diet covered)/population.

METHODOLOGICAL  
NOTES

Calculating  
Food Aid  
Needs

This report provides measures of the need for food aid to support consumption of major food staples and to support an adequate level of food security stocks for food grains. The framework used for calculating food aid needs to support consumption for each country, total and by commodity, is outlined below in algebraic form:

$$(1) \text{ FANCV}_t = \text{IRCV}_t - \text{CICV}_t$$

$$(2) \text{ FANCV}_j = \text{IRCV}_j - \text{CICV}_j;$$

subject to

$$\text{IRCV}_j \geq 0$$

$$(3) \text{ FANCQ}_j = \text{IRCQ}_j - \text{CICQ}_j;$$

subject to

$$\text{IRCQ}_j \geq 0$$

where the subscript  $t$  indicates a country total, and the subscript  $j$  indicates a group of substitutable food commodities (see section below on substitution assumptions) in the country, and where:

$\text{FANCV}$  = food aid needs to support consumption, value (\$ million);

$\text{FANCQ}$  = food aid needs to support consumption, quantity (1,000 tons);

$\text{IRCV}$  = food import requirements to support consumption, value (\$ million);

$\text{IRCQ}$  = food import requirements to support consumption, quantity (1,000 tons);

$\text{CICV}$  = commercial food import capacity, value (\$ million); and

$\text{CICQ}$  = commercial food import capacity, quantity (thousand tons).

The general framework for calculating  $\text{IRCV}_t$ ,  $\text{IRCV}_j$ , and  $\text{IRCQ}_j$  is as follows:

$k$

$$(4) \text{ IRCV}_t = \sum \text{IRCV}_j;$$

subject to

$$\text{IRCV}_j \geq 0$$

$j=1$

where  $k$  is the number of groups of substitutable food staples in a country and included in this assessment;

$$(5) \quad IRCV_j = IRCQ_j * IUV_j$$

where  $IUV$  = estimated import unit values in dollars (see section below on import unit value calculations); and

$$(6) \quad IRCQ_j = \sum_{i=1}^n (IRCQ_i / WE_i)$$

where the subscript  $i$  indicates an individual food staple and  $n$  is the number of food staples in a substitutable food group, and where:

$IRCQ$  = estimated import requirement for a commodity in 1,000 tons, and

$WE$  = wheat-equivalent conversion factors for a commodity if the commodity is a noncereal and is assumed to be substitutable for cereals on a caloric-equivalent basis. If a commodity group is not substitutable with cereals (i.e., vegetable oils, milk, pulses) then  $IRCQ_j$  is not converted to a wheat equivalent.

The procedures used for calculating  $IRCQ$  in status quo and nutrition-based estimates are described in separate sections below. The structure for both of these  $IRCQ$  calculations is as follows:

$$(7) \quad IRCQ_i = DR_i - PR_i$$

$$(8) \quad DR_i = DRNF_i + DRF_i$$

where:

$DR$  = domestic requirement in 1,000 tons;

$DRNF$  = domestic requirement for nonfeed use in 1,000 tons;

DRF = domestic requirement for feed use in 1,000 tons  
(see section below on method of calculating feed  
use); and

PR = forecast production in 1,000 tons (source: ERS  
estimates).

The procedure for calculating  $CICV_t$  in equation (1) above is:

$$(9) \quad CICV_t = \sum_{j=1}^k CICV_j$$

The method of calculating  $CICV_j$  and  $CICQ_j$  is described in a separate section below.

The following points should be noted on the treatment and interpretation of negative values in import requirement and food aid need calculations:

1. A negative import requirement for a commodity group in quantity and value terms ( $IRCQ_j < 0$ ,  $IRCV_j > 0$ ) implies a 'surplus' in domestic production above what is needed to support consumption. The surplus is, by definition, not substitutable for any shortfalls in other commodity groups. While these negative values, where they occur, are carried in the tables containing estimates of food aid need to support consumption, they are factored in as zeros when calculating food aid needs to support consumption for the commodity group ( $FANCQ_j$ ,  $FANCV_j$ ), and in calculating country total import requirements ( $IRCV_t$ ) and food aid needs ( $FANV_t$ ). This is appropriate because inclusion of the negative value would imply exports of the calculated surplus (and an addition to commercial import capacity). If the country is a traditional exporter of the surplus commodity, the impact of the export earnings on food aid needs is already accounted for in the commercial import capacity calculation. If the country is not a traditional exporter of the surplus commodity, imposition of an export requirement for the purpose of aid need calculations would be an unnecessarily rigid means of assessment.
2. When a negative food aid need value occurs for a commodity group ( $FANCV_j < 0$ ), this calculated surplus is made to offset any positive food aid need ( $FANCV_j > 0$ ) for other commodity groups in that country. This is appropriate because of conditions imposed on the calculation of food aid needs for commodity groups ( $FANCQ_j$ ,  $FANCV_j$ ) described above. Negative food aid need values imply a surplus of estimated commercial import capacity in a food group; the surplus can appropriately be diverted to purchases in another food group. These situations are footnoted in the country tables.



3. Negative country food aid need totals imply a surplus in commercial import capacity ( $CICV_t$ ), over and above what imports are needed to support consumption in all commodity groups ( $IRCV_t$ ) in the country. They do not imply food aid availability. Such negative values, when they occur we show as zeros in the food aid need tables. However,  $FANCV_t$ , whether positive or negative, is the value used in the food aid need ranking provided in the section of this report entitled "Allocating Food Aid."

With estimates derived in this way, the larger the gap between domestic food availabilities and food requirements, or the smaller the capacity to import food commercially, the larger the aid need. Other things being equal, gains in domestic production, or lower levels of feed use, will reduce estimated import requirements and food aid needs. To the extent that the food staples selected for a country are judged to be substitutable, any estimated food surpluses are applied to filling the gap for commodities estimated to be in deficit. Also, for any commodity group where a surplus commercial import capacity exist, that surplus is applied to any estimated deficits for other commodity groups. No allowance is made for the effects of stock adjustments, positive or negative, on import requirements or aid needs. The need for stock adjustments and their impact on aid needs are estimated separately, as described in following sections.

Calculating  
Status Quo  
Based Import  
Requirements

Status quo-based import requirements for a particular country, commodity, and year are calculated, following equation (7) in the previous section, as:

$$(10) \quad IRCQ = (DRNF + DRF) - (PR)$$

where DRF and PR are as defined elsewhere. Status quo-based estimates of domestic requirements for nonfeed use (DRNF) are calculated as:

$$(11) \quad DRNF = P \cdot PCC_B / 1000$$

where:

$P$  = population in millions;

$PCC$  = per capita nonfeed consumption of a commodity in kilograms per year; and

subscript B = the base period over which PCC is averaged, in this report 1980-83.

Note that one or more years of unusually low (or unusually high) per capita food availability during the base period will distort import requirements. It is therefore necessary to scrutinize the representativeness of each base period year when interpreting status quo-based import requirement and aid need estimates.

Calculating  
Nutrition-  
Based  
Import  
Requirements

The general form of the nutrition-based import requirement equation is the same as shown in (7) above. But, because the nutrition-based method uses a nutritional norm rather than the status quo, it is necessary to assess domestic availabilities and domestic nonfeed requirements on a net basis--net of milling, seed, waste, and nonfood use. With these adjustments, the nutrition-based import requirement calculations for a particular country, commodity, and year are as follows:

$$(12) \quad IRCQ = ((DRNF_m - DA_m)/MR) + DRF$$

$$(13) \quad DRNF_m = \frac{(PCCAL_B/PCCAL_{TB})(RMPCCAL_T)(CALCF_m)}{(365)(P)/1000}$$

$$(14) \quad DA_m = \frac{[(PR)(1 - (NFUR + WR + AUR)) - (SR \cdot PR)]}{(MR)(1 - NFUR_m + WR_m)}$$

The variables IRCQ, DRNF, DRF, P, and PR have been described elsewhere. The new variables in the nutrition-based equation are:

DA = domestic availability in 1,000 tons;

MR = milling/extraction rate of particular commodity  
(source: FAO),

subscript m = indicates a variable expressed in  
milled/extracted terms;

PCCAL = daily per capita consumption of a particular  
commodity in calories (source: FAO and ERS; see  
notes below);

subscript B = the base period used to specify per capita  
caloric consumption (see notes below);

subscript T = a total for all commodities in the diet;

RMPCCAL = recommended minimum total daily caloric intake  
(source: FAO);

CALCF = factor for converting calories per capita for a  
particular commodity to kilograms per capita  
(source: FAO);

NFUR = average rate of utilization for nonfood purposes  
for a particular commodity during 1975-77  
(source: FAO);

WR = rate of waste for a particular commodity (source: FAO);

AUR = average rate of use in alcoholic beverages manufactured from a particular commodity during 1975-77 (source: FAO); and

SR = average rate of seed use from production for a particular commodity during 1975-77 (source: FAO).

Thus, in the nutrition-based method, domestic requirements for nonfeed use (DRNF) in milled/extracted terms are calculated by first determining commodity caloric shares in the total diet in a base period and, on the basis of those shares, determining the per capita caloric amounts needed to achieve the FAO recommended minimum. These per capita daily caloric estimates are then converted to annual countrywide requirements in terms of tons of milled commodity. Domestic availability (DA) is calculated in milled terms by adjusting coarse domestic production (PR) for nonfood use, waste, alcoholic beverage use, and seed use, and milling/extraction losses using rates derived from the FAO food balances. Import requirements in coarse terms are then computed as the unmilled difference between DRNF and DA plus requirements for feed use (DRF). It is important to note that the import requirement estimates derived from this procedure do not allow for reductions from waste, nonfood use, or alcoholic beverage and seed use from imported commodities; only reductions for feed use and milling/extraction are accommodated.

The appropriate measure of coarse domestic production (PR) for the nutrition-based method is identical to that used in the status-quo method. The calculation of import requirements (IRCQ) in coarse terms is shown above, and the appropriate calculation of coarse domestic requirements (DR) for the nutrition-based method is:

$$(15) \quad DR = PR + IRCQ.$$

The following points should be noted on procedures used in the nutrition-based calculations:

1. Calories available from a commodity are derived using the 1975-77 FAO food balance data for a particular commodity and country.
2. The base period used in calculating each commodity's caloric share in the diet in each country is 1975-77, unless the average suggests use of 1 of the 3 years individually. In some instances, it was necessary to adjust a particular commodity's share of total caloric intake because of differences between ERS and FAO production or trade data or because of changes in diet composition since 1977.

3. Calculations of coarse per capita consumption from the targeted coarse total use and population data provided may yield slightly different levels for 1984 and 1985. They may vary from year to year because no nonfood use, waste, alcoholic beverage use, or seed use is deducted from imports and the mix of imports and domestic availability may change from year to year. At the levels shown for targeted coarse total use and population, however, actual per capita consumption of a commodity will be identical in both years.
4. For many countries, the proportion of feed use implied in the 1975-77 FAO food balances is very similar to that implied by the estimates of feed use (DRF) in this report. Where significant differences occurred, adjustments were made in the base-period human consumption levels ( $PCCAL_{1B}$  and  $PCCAL_{TB}$ ) for the purposes of the nutrition-based calculations. These alterations were judged necessary to allow the use of a common assumption on feed use for both methods, and to prevent differences in feed assumptions from interfering with the interpretation of the two food aid need estimates.
5. Because rice is normally traded on a milled (as opposed to paddy) basis, and all rice production, stock, and trade data presented in this report are on a milled basis, the nutrition-based import requirement equations used for rice are modified to accommodate this difference.

Import requirements estimated this way would provide enough food per person to meet the FAO recommended minimum daily caloric intake. The FAO caloric standards have been criticized for overestimating minimum requirements and the FAO food balance assumptions used in this report have also been criticized for their accuracy. In regard to the caloric standards, the key issue is whether they introduce any bias across the countries examined. Because the caloric standards are derived using a similar methodology across all countries, it is unlikely that significant bias is introduced. In any event, errors in absolute levels of estimates do not prevent the use of those estimates in generating country rankings. Also, errors do not prevent the priorities indicated from being preserved when food aid needs are scaled down in some manner to match food aid availabilities.

Similarly, the FAO food balance assumptions are considered to be of comparable reliability for all countries covered, and the methods used for calculating food balances are consistent. Therefore, it is considered unlikely that significant bias across countries is introduced by their use.



### Calculating Feed Use

The same levels of estimated feed use are included in the calculation of both the status quo- and nutrition-based estimates. The procedure used to calculate feed (DRF) use of a particular commodity in a given country and year is:

$$(16) \quad DRF = P * PCCF_B / 1000$$

where P is population in thousands as defined earlier, and

PCCF = per capita utilization of a commodity for  
livestock feed (source: ERS estimates), and

subscript B = the base period over which PCCF is averaged.  
The base period used in this report is  
1980-83.

With this method of calculation, feed use grows from the base period average at the same rate as population. The implication, which is intended for the purpose of food and need estimates, is that no growth in per capita feed use is provided for. The representativeness of the base period average must, however, be scrutinized when interpreting the calculated levels of feed use. Import requirement estimates for countries experiencing rapid growth in feed use (and livestock production) are constrained by this procedure.

### Calculating Food Security Stock Adjustment

This report provides separate estimates of countries' cereal stock adjustment needs to assure food security. Stock requirements are segregated from consumption requirements because, for food aid allocation purposes, assured food supplies to support consumption may be viewed as the first priority. Nevertheless, a program which adjusted food aid allocations to recipient countries' stock positions could help prevent food emergencies in these countries, and also help reduce abrupt swings in food aid needs from year to year. This would be achieved by allowing for stock building in relatively good years, and/or when stocks are relatively low, and for stock drawdown in relatively bad years, and/or when stocks are relatively high.

In this report, estimates of stock adjustments are made only for the commodity group comprising cereals and cereal equivalents for countries where historical stock data are available. Stock adjustment estimates are limited to the cereal-equivalent category because historical stock data commonly are only available for this commodity group, and because cereals are the predominant food staple in recipient countries. The procedures for estimating stock adjustments outlined below use historical relationships between stocks and consumption in each country. In the absence of consistent data on stock-building targets and minimally acceptable stock levels to be drawn down to in each country, observed historical ratios of stocks to consumption are used to define the range of adjustment.



The procedures are outlined below in algebraic form. Stock levels are calculated in absolute terms and in terms of increments to be added to (or subtracted from) existing stocks. These increments are then added to estimates of import requirements and food aid needs to support consumption in order to obtain an estimate of needs to support both consumption and stocks. The following variables are used in estimating stock adjustments:

TPCE = total production of cereals and cereal equivalents in 1,000 tons;

TCEES = total ending stocks of cereals and cereal equivalents in 1,000 tons;

ESR = ratio of ending stocks to total nonfeed use;

MNESR<sub>B</sub> = average ratio of ending stocks to total nonfeed use for cereal equivalents during base period B (1980-1983 in this report);

MXESR<sub>B</sub> = maximum ratio of ending stocks to total nonfeed use for cereal equivalents during base period B;

MINESR<sub>B</sub> = minimum ratio of ending stocks to total nonfeed use for cereal equivalents during base period B;

SQNFU = status quo-based estimate of domestic requirements for nonfeed use (DRNF) in 1,000 tons;

subscript t = year for which stock adjustment is being calculated;

ASL = adjusted stock level in 1,000 tons;

SAQ = stock adjustment in terms of the increment to existing stocks in 1,000 tons; and

SAV = stock adjustment in \$ million.

Using the above-named variables the adjusted stock level (ASL) for year t (the first forecast year) is calculated in the following way:

If  $TPCE_t \geq \text{trend}$  and  $ESR_{t-1} \leq 1.1 * MNESR_B$ :

$$ASL_t = (ESR_{t-1} + (MXESR_B - ESR_{t-1})/3) * SQNFU_t$$

If  $TPCE_t \geq \text{trend}$  and  $ESR_{t-1} > 1.1 * MNESR_B$ :

$$ASL_t = ESR_{t-1} * SQNFU_t$$

If  $TPCE_t < \text{trend}$  and  $ESR_{t-1} < .9 * MNESR_B$ :

$$ASL_t = (ESR_{t-1} + (MXESR_B - ESR_{t-1})/3) * SQNFU_t$$

If  $TPCE_t < \text{trend}$  and  $1.1 * MNESR_B \geq ESR_{t-1} \geq .9 * MNESR_B$ :

$$ASL_t = ESR_{t-1} * SQNFU_t, \text{ and}$$

If  $TPCE_t < \text{trend}$  and  $ESR_{t-1} < 1.1 * MNESR_B$ :

$$ASL_t = ((ESR_{t-1} + MINESR_B)/2) * SQNFU_t.$$

The stock adjustment for year  $t$  in quantity ( $SAQ_t$ ) and value ( $SAV_t$ ) terms is calculated as:

$$SAQ_t = ASL_t - TCEES_{t-1}, \text{ and}$$

$$SAV_t = SAQ_t * IUV_t$$

where  $IUV_t$  is the estimated import unit value for cereals in year  $t$  as defined in the following section.

The adjusted stock level for (ASL) for year  $t+1$  (the second out year) is calculated using the identical equations as for year  $t$  with the following substitutions:

1. The subscript  $t+1$  is substituted for the subscript  $t$ .
2. The variable  $AESR_t$  (adjusted ending stock ratio in year  $t$ ) is substituted for  $ESR_{t-1}$ , where  $AESR_t = ASL_t / SQNFU_t$

The stock adjustment for year  $t+1$  in quantity ( $SAQ_{t+1}$ ) and value ( $SAV_{t+1}$ ) is calculated as:

$$SAQ_{t+1} = ASL_{t+1} - ASL_t, \text{ and}$$

$$SAV_{t+1} = SAQ_{t+1} * IUV_{t+1}.$$

Stock adjustments calculated by the procedures described above have the following characteristics:

1. If production is above trend, stocks are built up if they are relatively low and are allowed to remain relatively high if they are already relatively high. If production is below trend, stocks are built up if they are relatively low, left unchanged if they are around the base-period mean, and drawn down if they are relatively high. If stocks are relatively low, stock building is allowed for in both above and below trend production situations for reasons of food security.

2. The rates of stock adjustment used in the calculations are, when building, one-third of the difference between the base period maximum stock ratio and the current stock ratio, and when drawing down, one-half the difference between base period minimum stock ratio and the current stock ratio. A faster rate was used for drawing down than for building because generally stocks are drawn down more rapidly than they are rebuilt. The one-third rate used for stock building implies a 3-year stock building period.
3. The procedures assume the reasonableness of working with minimum, maximum, and mean ending stock ratios observed during the base period, given the lack of consistent data on appropriate stock targets and minimum acceptable stock levels. Moreover, government stock targets, where available, may not be consistent with either historically achieved stock levels or existing storage facilities. The use of adjustments toward rather than to the base-period levels diminishes the effect of errors caused by atypical base-period observations.
4. The magnitude of year-to-year stock adjustments (SAQ, SAV) depends on both the calculated change in the ending stock ratio in  $t+1$  and the difference between actual total nonfeed use in  $t$  and status quo-based nonfeed use (SQNFU) in  $t+1$ . In some cases, abrupt changes in actual and calculated nonfeed use between  $t$  and  $t+1$  may distort the intended direction of the stock adjustment. (For example, even if the situation calls for an increase in the ending stock ratio (ESR), stocks could decline from  $t$  to  $t+1$  if the status quo estimate of nonfeed use (SQNFU) for  $t+1$  was sharply below actual use in  $t$ .) These situations are described in the country narratives.
5. The stock adjustment estimates (SAQ, SAV) can be applied to the consumption estimates for cereals to obtain an overall estimate of import requirements ( $IRTQ_{ce}$ ,  $IRTV_{ce}$ ) and food aid needs ( $FANTQ_{ce}$ ,  $FANTV_{ce}$ ) for cereals in the following way:
  - a. If  $IRCQ_{ce}$  and  $IRCV_{ce}$  are negative (implying a surplus of cereals for consumption purposes which can be applied to stock adjustments):

$$IRTQ_{ce} = IRCQ_{ce} + SAQ;$$

$$IRTV_{ce} = IRCV_{ce} + SAV;$$

$$FANTQ_{ce} = FANCQ_{ce} + IRTQ_{ce}$$

subject to

$$IRTQ_{ce} > 0;$$

$$FANTV_{ce} = FANCV_{ce} + IRTV_{ce},$$

subject to

$$IRTV_{ce} > 0.$$

If import requirements remain negative after adding the stock adjustment, food aid needs are not affected. This situation implies a surplus of cereals above what is needed to support consumption and stock adjustment, but a surplus which cannot be exported for foreign exchange or applied against deficits in other non-substitutable food categories.

- b. If  $IRCQ_{ce}$  and  $IRCV_{ce}$  are positive (implying a deficit in cereals and no surplus of cereals which can be applied to stock adjustments):

$$IRTQ_{ce} = IRCQ_{ce} + SAQ;$$

$$IRTV_{ce} = IRCV_{ce} + SAV;$$

$$FANTQ_{ce} = FANCQ_{ce} + SAQ; \text{ and}$$

$$FANTV_{ce} = FANCV_{ce} + SAV.$$

Calculating  
Import Unit  
Values

Import unit value (IUV) estimates are used in this report to convert tonnage import requirements (IRCQ) to value estimates (IRCV), and to convert estimated commercial import capacities in dollars (CICV) to tonnage terms (CICQ). Import unit values are computed for each country, year, and commodity group j as follows:

$$IUV_j = (IUV_{jB}/USXUV_{jB})FUSXUV$$

where:

$IUV_{jB}$  = a country's average import unit value for commodity group j during a base period B(1980-82 in this report). In some cases, lack of current data has necessitated the estimation of country import unit values from those of nearby countries (sources: FAO and ERS).

USXUV<sub>jB</sub>= the average U.S. export unit value for commodities in group j during a base period B. The average U.S. export unit values used for each commodity group in the report are as follows: cereal equivalent = wheat; vegetable oils = soybean oil, pulses = dry beans, milk = nonfat dry milk converted to fluid equivalent.

FUSCUV<sub>j</sub>= the forecast U.S. export unit value for commodities in group j for the appropriate year (source: ERS).

Estimated import unit values are, therefore, dependent on a base-period ratio between a country's import unit value and the U.S. export unit value for a particular commodity, and on the forecast U.S. export unit value of that commodity. The use of the base-period ratio is intended to compensate for differences in transport costs to various countries from both U.S. and non-U.S. ports, depending on who the base period suppliers were, as well as quality differences between what a country normally purchases and the U.S. average quality.

Commodity  
Coverage

The commodities included in the food aid needs assessment for each country were selected to cover the important food staples in the diet in each country. An attempt was made to include staples accounting for at least two-thirds of the average daily caloric intake in each country, to assure that assessments of domestic food availability and requirements in each country are representative of the total food supply situation. For a few countries, less than two-thirds of the diet is covered. This is due either to great diversity in the average diet; to limited availability of current, reliable data; or to both. Coverage is more complete in Asian and African countries, where relatively few food staples account for the bulk of the average diet, and less complete in Latin American countries, where diets are more diversified. The specific commodities included in the food aid needs assessment for each country and their share in daily per capita caloric intake in the appropriate base period are included in the tables.

Food  
Substitution  
Assumption

Assumptions regarding the substitutability of foods in the diet are necessary in assessing food aid needs, because shortages in some food items can be compensated for by surpluses or imports of others. Also, some food items which figure prominently in diets in low-income countries, particularly roots and tubers, are not commonly traded and, therefore, are not available to fill food aid requirements.

In this report, all cereals (including wheat, rice, and coarse grains) are considered substitutable on a one-for-one basis. Roots and tubers (bananas and plantains are included for convenience of calculating cereal-equivalent) are assumed substitutable for cereals on a caloric equivalent basis. The treatment of pulses depends on their importance and role in the diet.



In African countries, where pulses constitute a relatively small share of the diet, they are assumed substitutable for cereals on a caloric-equivalent basis. In Asia and Latin America, however, where pulses serve as important complements to cereals and are major sources of protein, they are not considered substitutable for cereals and remain separate in the aid need estimates. Vegetable oils and milk are not considered substitutable for cereals in any case because of their very different roles in food preparation and consumption.

Where applicable, commodities are converted to wheat equivalents. The conversion factors are derived from the FAO food balances and are specific to particular countries and commodities.

Calculating  
Commercial  
Import  
Capacity

A country's capacity to pay for imports of food staples is calculated in two steps. The first formula measures the country's available foreign exchange and is as follows:

$$(1) \text{ FEA} = \text{MEE} - [(\text{IR}_B / \text{MI}_B \cdot \text{MI}) - \text{IR}] - \text{DS};$$

where:

FEA = estimated foreign exchange availability in \$ million

MEE = projected merchandise export earnings in \$ million (sources: World Bank and ERS);

$\text{IR}_B$  = international reserves during the base period in million dollars (sources: IMF and World Bank);

$\text{MI}_B$  = merchandise imports during the base period in \$ million (sources: IMF and World Bank);

MI = projected merchandise imports in \$ million (sources: World Bank and ERS);

IR = projected international reserves in \$ million (sources: World Bank and ERS);

DS = projected debt service in \$1 million (sources: World Bank and ERS); and

B = the base period over which IRC and MI are averaged, (in this report, 1980-83.

Simply put, this formula states that the foreign exchange available for commercial food imports depends on export earnings, less any allowance for the accumulation or drawdown of reserves and debt-service payments. The allowance for reserves is based on the notion that during the projection period a country be permitted to maintain a ratio of reserves to imports equal to the ratio in the base period. The term within the brackets determines the allowance for the accumulation of reserves.

To illustrate, take the case of Ghana, where, for 1983:

$$MEE = 700$$

$$IR_B = 119$$

$$MI_B = 736$$

$$MI = 675$$

$$IR = 125$$

$$DS = 85$$

$$(2) \quad FEA = 700 - \frac{[119 * 675] - 125}{736} - 85$$

$$(3) \quad FEA = 700 - [.16 * 675] - 125 - 85$$

$$(4) \quad FEA = 700 - [109 - 675] - 85$$

$$(5) \quad FEA = 700 - [-16] - 85$$

$$(6) \quad FEA = 631$$

Equation (3) indicates that, from 1980-83, Ghana held reserves equal to about 16 percent of imports. After multiplication of this figure by the 1984 import projection, equation (4) shows that \$109 million of reserves are needed to maintain the same reserves/imports ratio. Equation (5) shows the amount of reserves that Ghana is allowed to accumulate--the difference between reserves needed to maintain the base-period ratio and projected reserves. Equation (6) indicates the available foreign exchange for Ghana in 1984.

The next step in the formula determines the amount of available foreign exchange to be applied toward commercial imports of foods in a particular group of substitutable foods (cereals, and roots and tubers, pulses, vegetable oils, etc.) designated by the subscript j. This step is specified as follows:

$$(7) \quad CICV_j = FEA * (CFI_{jB}/MEE_B)$$

where:

$CICV_j$  = estimated commercial import capacity for food commodities in group j in \$ million;

$FEA$  = estimated foreign exchange availability in \$ million as derived from part 1 of the formula;

$CFI_{jB}$  = commercial food imports of commodities in group j during the base period in \$ million (sources: FAO and ERS);

$MEE_B$  = merchandise export earnings during the base period in \$ million (sources: IMF and World Bank) and

$B$  = the base period over which CFI and MEE are averaged (in this report, 1980-83).

This method projects the ability of a country to purchase food imports, based on the percentage of export earnings spent on food imports during the base period.

To continue the illustration with Ghana for the food group consisting of cereals, and roots and tubers, where:

$$FEA = 631$$

$$CFI_{jB} = 56$$

$$MEE_B = 813$$

$$(8) \quad CICV_j = 631 * \underline{(56)}$$

$$813$$

$$(9) \quad CICV_j = 631 * (.069)$$

$$(10) \quad CICV_j = 43.5$$

Equation (9) indicates that Ghana spent roughly 7 percent of its export earnings on imports of cereals, and roots and tubers during the base period. For the purpose of food aid needs assessment, it is expected that the same percentage, or \$43.5 million, of its available foreign exchange will be committed to import food staples in 1984/85.

A few shortcomings of this method should be noted. Countries that historically have spent a greater share of export earnings on food imports will be expected, for the purpose of this assessment, to spend the same share in forecast years. In contrast, countries that spend relatively little on food will be expected to continue spending that lower ratio.

Furthermore, countries whose base-period reserves-to-imports ratio is high may be permitted to accumulate reserves at a faster rate than countries with a lower ratio. Finally, because debt-service figures for many countries include expected payments only on the debt that has already been contracted, forecasts of debt service may be understated.

## Glossary of Terms

Status quo	Per capita food availability of 1980/81-1983/84
Nutrition-based	Per capita food availability sufficient to meet internationally accepted minimum nutritional standards
Cereal equivalent	Cereal required to meet both cereal shortfalls and cereal equivalent (caloric basis) shortfalls in roots and tubers
Import requirement	Imports necessary to achieve either status quo or nutrition-based food availability, including both commercial and concessional food shipments
Food aid need	The volume of food imports required to fill the gap between import requirements and commercial food import capacity
Tons	Metric tons
Dollars	U.S. dollars unless otherwise specified
GNP	Gross national product
GDP	Gross domestic product



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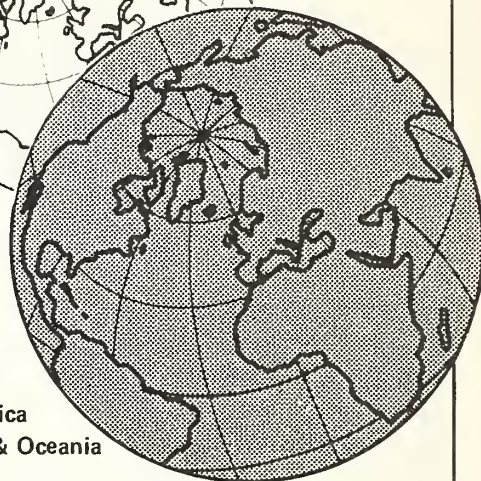
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